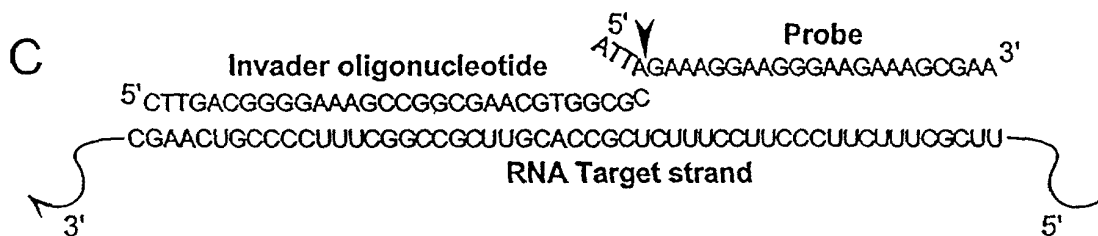
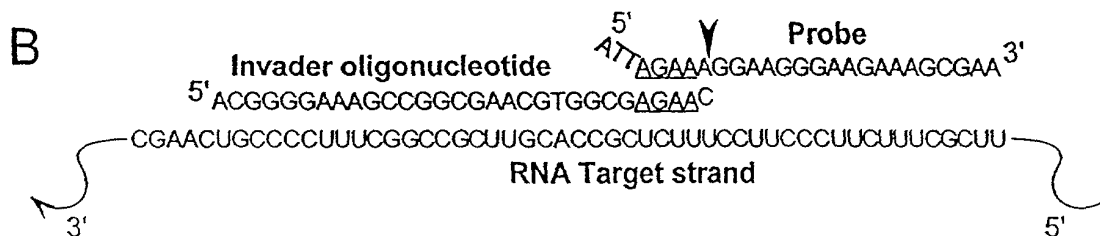


FIGURE 1

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# FIGURE 2



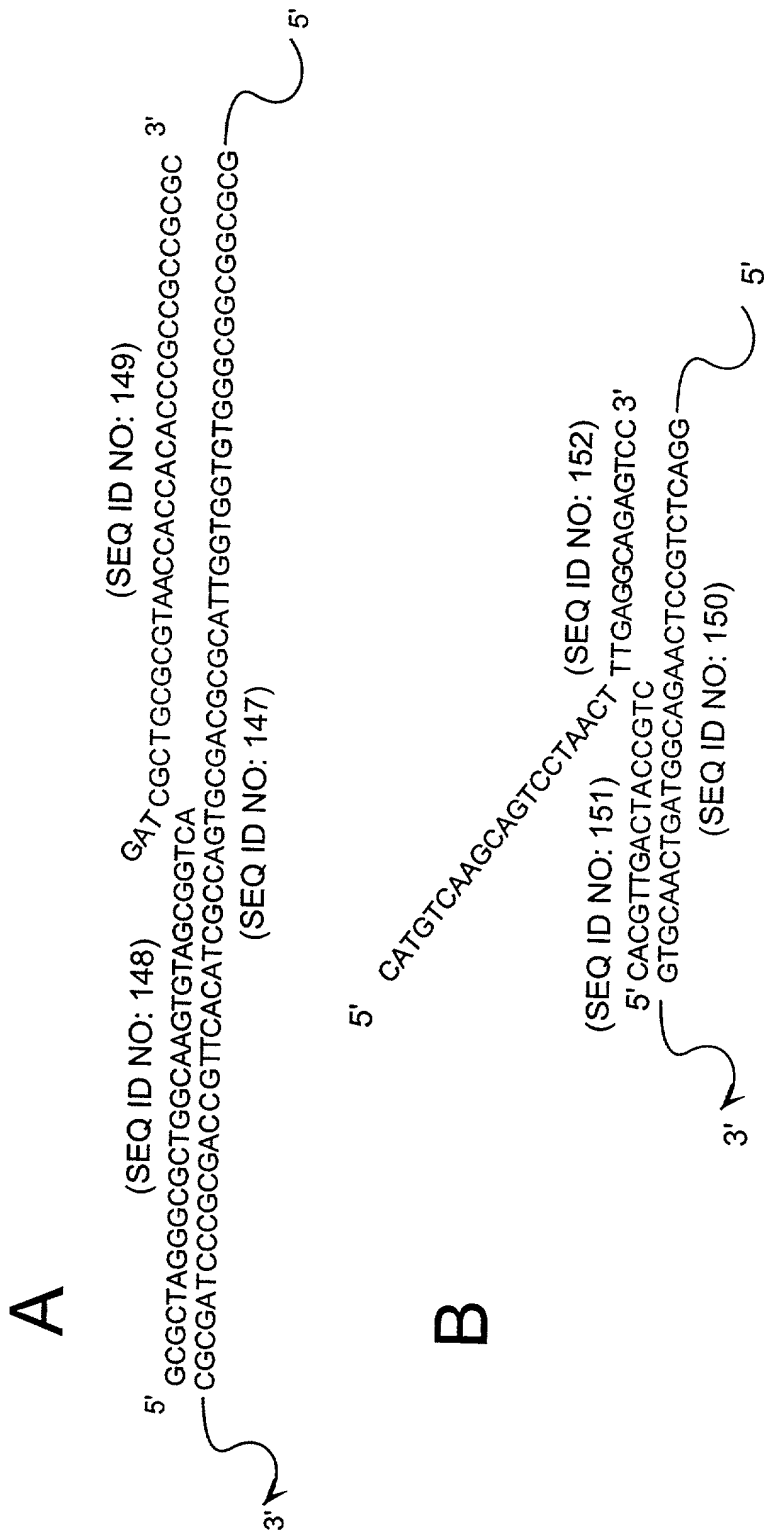


FIGURE 3

10084639-022270-5294001

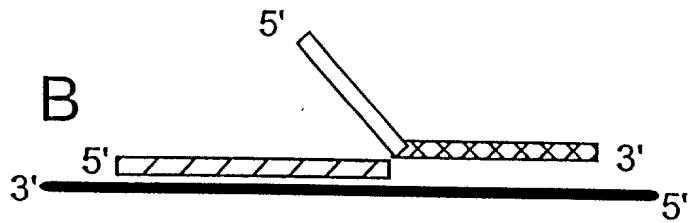
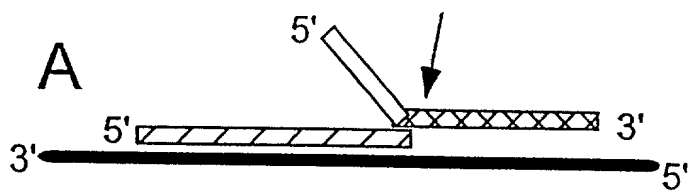


FIGURE 4



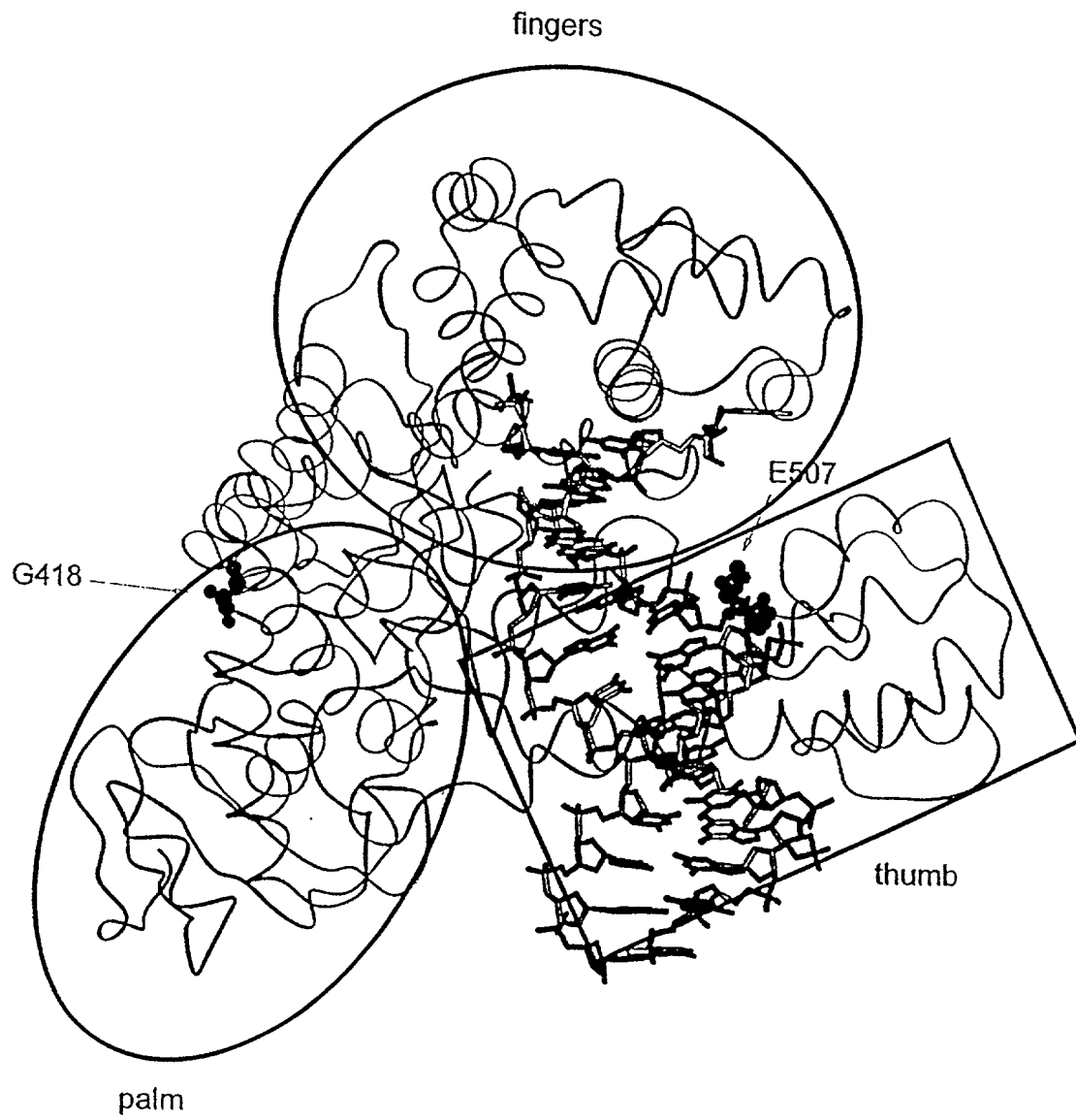


FIGURE 5

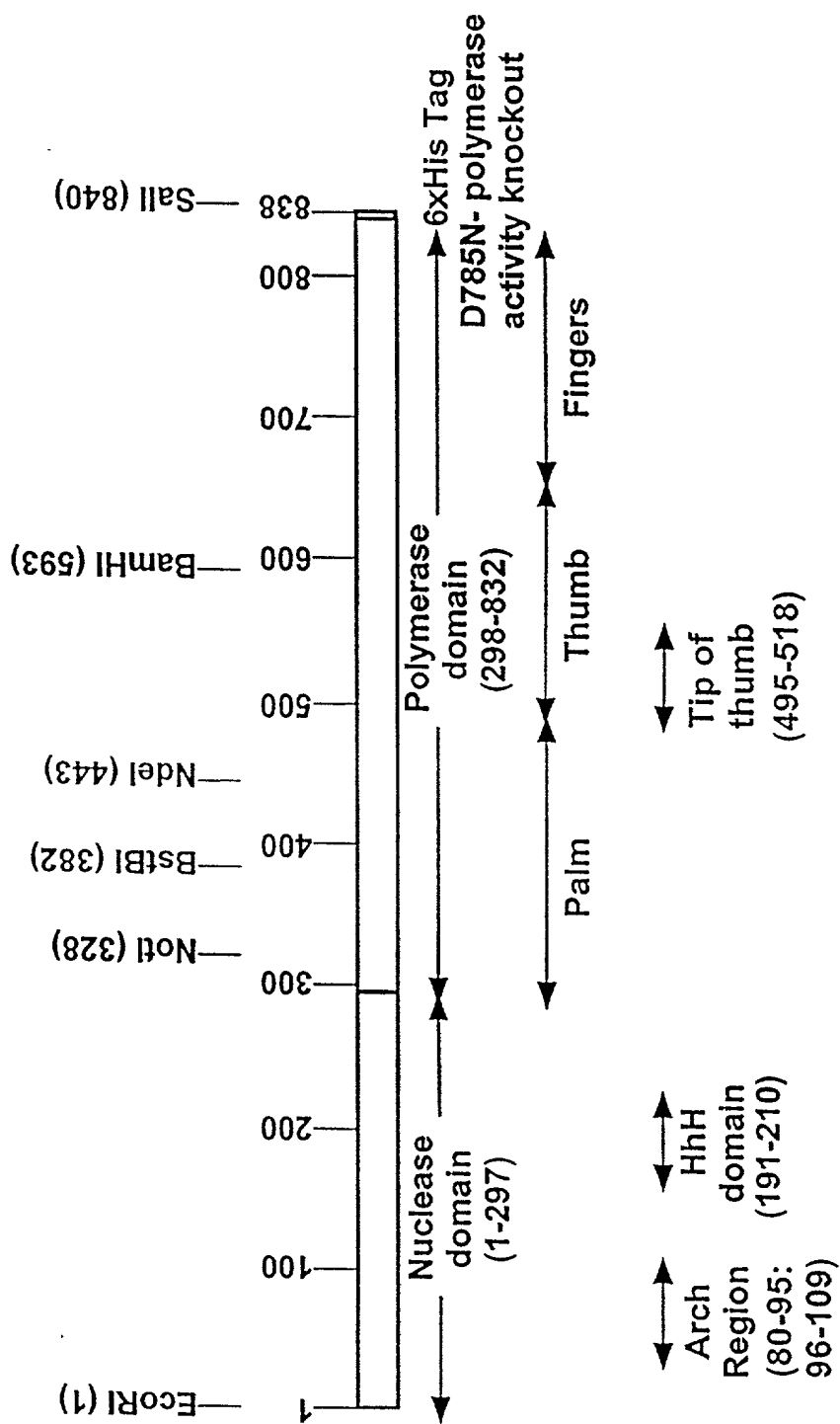


FIGURE 6

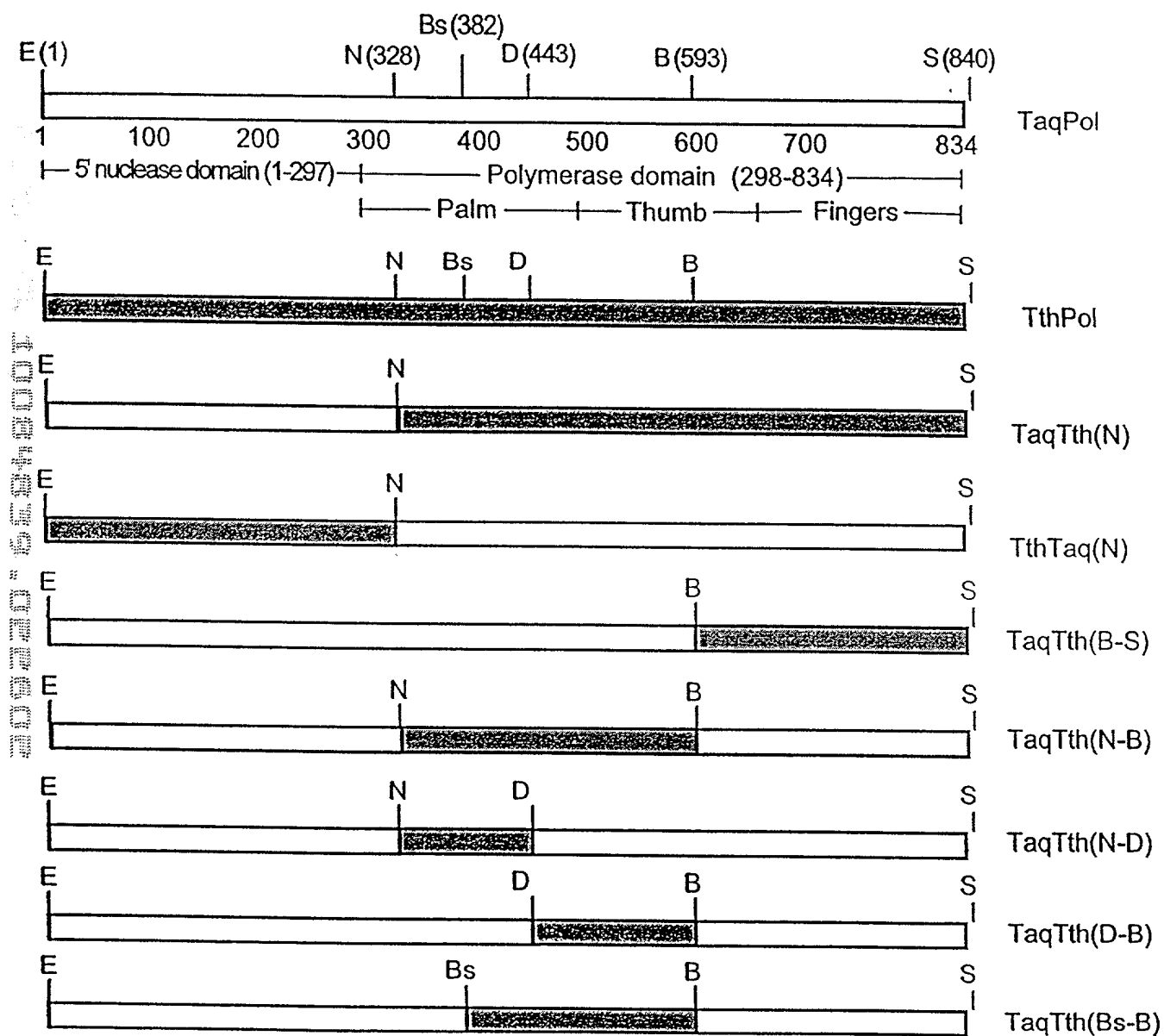


FIGURE 7

DNAPTAQ	A.....G.....T.....A.C.....T.A.C.....	G.....G.....T.....A.C.....	347
DNAPTFL	.....G.....T.....A.C.....T.....G.....	T.....G.....T.....G.....	344
DNAPTTH	.....G.....T.....A.C.....T.....A.C.....	T.....G.....T.....A.C.....	350



MAJORITY [SEQ ID NO:156] TCGAGGGCCACATGGAXGAGCTGAXGCTCTCCTGGGAGGCTXTCCGAGGTGGGGACGGAGCTGCCGCTGGA

DNAPTAQ [SEQ ID NO:153] T.....C..T...A.....C..GG..A.....C..... 764  
 DNAPTFL [SEQ ID NO:154] GGG.....G..C...GCC..T...C..A...T.....A...T..... 761  
 DNAPTTH [SEQ ID NO:155] A.....C...A.....C..G.....T.....G.....C..... 770

MAJORITY GGTGGACTTCGCCAAGXGGGGGAGGGCCGACCGGGGAGGGGCTTAGGGCCCTTCTGGAGAGGCTGGAGTIT

DNAPTAQ .....AA.....A.....A.....T.....T..... 834  
 DNAPTFL .....GG..G..C..G..CACA...A...T.....T...GC...T...T.....C..T..... 831  
 DNAPTTH .....C.....C..G.....C.....C.....C.....C.....C..... 840

MAJORITY GGCAGGCTCCTCCAGGAGTTCCGGCTCCTGGAGGGGGCCGAGGGCCCTGGAGGAGGGCCCTGGCCGCGCGG

DNAPTAQ .....T.....AA.....A.....GGA.....T..... 904  
 DNAPTFL .....A.....G.....G.....GGA.....T..... 901  
 DNAPTTH .....G.....G.....G.....G.....G..... 910

MAJORITY GCGAAGGGGCTTCGTGGGCTTTGTCCTTCCCGCCCGGAGCCCATGTGGGGCGAGGCTTCTGGCCCTGGC

DNAPTAQ .....G.....AAG.....T..... 974  
 DNAPTFL .....T..TT.....TC..T.....T..... 971  
 DNAPTTH .....C.....C.....G.....AAA..... 980

MAJORITY GCGCGCCAGGGAGGGGGGTCCACGGGGGACGACGCCCTTTAXGGGCTTAXGGGACCTXAAGGAGGCTG

DNAPTAQ .....G.....G..C..G..T..A..AA..C...C.....G.....C. 1044  
 DNAPTFL T..GG..GT.....G..CC.....T.....A.....C.....G.....T.....G... 1041  
 DNAPTTH ....TG.....C.....G.....G.....GGC...G..A..A.....C.....C 1050

## FIGURE 8D

MAJORITY [SEQ IDNO:156] CCGGGXCTCCTCGCGAAGGAGCTGGCGCTTTTGGCGCTGAGGAGGGCGCTXGACCTCXTGGCGGGGACG

DNAPTAQ	[SEQ ID NO:153]	G. T.	A.	AG.	C.	A.	T. G.	CG.	C.	1114
DNAPTFL	[SEQ ID NO:154]	AA.	G.		G.	C.	G.	T. C.	A. A.	1117
DNAPTHH	[SEQ ID NO:155]	C.		C.	C.	TC.	G. A.	G.		1120

MAJORITY ACGGCATGCTCGGGTACCTCCTGGACCCCTCCACACACCCCGGGGTGGCCGGCGGTACGG

DNAPTAQ	.....T.....	1184
DNAPTFL	.....G.....T.....	1181
DNAPTTH	.....G.....G.....	1190

**MAJORITY** GGGGGAGTGGACGGAGGAXGGGGGGGAGGGGGCGCTCCTXTCCGAGAGGCTCTTCCXGAAGCTXXXGGAG

Sequence	Position
DNAPTAQ	1254
DNAPTFL	1251
DNAPTTH	1260

MAJORITY GGGCTGAGGGGGAGGAGGGCTCCTTGGCTTACGAGGAGGTGGAGAGCCGCTTCCGGGTCCTGG

DNAPTAQ	A..G.....	G.....	G.....	GT....	1324
DNAPTFL	...A...A..AC.C.G.	G.....	G.....	GT....	1321
DNAPTTH	...C.....A.....	C.....	A.....	C.....	1330

MAJORITY CCCACATGGAGGGGCGGGGGTXXCGGGCTGGACCGTGGCGCTAGCTCCAGGGCCCTXTCCTGGAGGTGGCGGA

DNAPTAQ	G. C.	T. AG.	T. G.	C.	1394
DNAPTFL	GG.	G.	C.	A.	C 1391
DNAPTTH	G.	A.	T.	C. T.	1400

11/

MAJORITY [SEQ ID NO:156] GGAGATCGCGCGGCTCGAGGAGGAGGTCTTCCGCCCTGGCCGGCCAGCCCTTCAAGCTCAACTCCGCGGAG

DNAPTAQ [SEQ ID NO:153].....GC.....CC.....1464  
 DNAPTFL [SEQ ID NO:154].....G.G...AG..G.....1461  
 DNAPTTH [SEQ ID NO:155].....T...G.....1470

MAJORITY CAGCTGGAAGGGTGGTCTTTGACGAGCTXGGGCTTCCGCCCATCGGCAAGAGCGGAGACXGGCAAGC

DNAPTAQ .....G.....A.....1534  
 DNAPTFL .....GC.....G.C..G..T.....G..G..A. 1531  
 DNAPTTH .....TA.....T.G..G.....C.A.....A..... 1540

MAJORITY GCTCGACCGAGCGCGGCTGCTGGAGGGGCTXCGXGAGGGCCAGCCCATCGTGGAGAGATCCTGCAGTA

DNAPTAQ .....G.....C.....1604  
 DNAPTFL .....T.....G..A.....CGGC.....1601  
 DNAPTTH .....G.....A..G.....C...C. 1610

MAJORITY CCGGGAGCTCAGCAAGCTCAAGAACACCTACATXGACGGGCTGGCXGCGCTGGTCCACCCGAGGAGCGGGC

DNAPTAQ .....G...G.....T.....T...G.A...A.....1674  
 DNAPTFL .....A.....A.....G.C...G...A...G... 1671  
 DNAPTTH .....G.G.....G..AAG.....G..... 1680

MAJORITY CGCCTCCACACCGGCTTCAACGAGACGGGCGCAGGGGAGGCTTAGTAGCTCGGAGCCGCAACCTGC

DNAPTAQ .....A.....T.....C. 1744  
 DNAPTFL .....G.....C.....TCG.....1741  
 DNAPTTH .....G.....1750



# FIGURE 8F 2092210 BE2400T

MAJORITY [SEQ ID NO:156] AGAAGATCGCGGTGGGACGGCGCTGGGGCAGAGGATCGGGGGGGCGCTCGTGGCGGAGGAGGGGTGGGT

DNAPTAQ [SEQ ID NO:153].....G..T..G.....A..C.....G...G.. 1814  
 DNAPTFL [SEQ ID NO:154].....G.....T.....C..G.....A.....G...G... 1817  
 DNAPTTH [SEQ ID NO:155].....GT.....C.....G.....T.....G...T....G 1820

MAJORITY GTTGTGGCGCTGGACTATAGCCAGATAGAGCTCGGGGTGCTGGCCGACCTCTCGGGGAGGAGAACCTG

DNAPTAQ A.....T.....A.....G.....C..... 1884  
 DNAPTFL ..C.....T.....G.....T.....T.....C..... 1881  
 DNAPTTH .....T.....C.....G.....A..... 1890

MAJORITY ATCGGGGTCTTCAGAGGGGAGGAGATCCAGACCCAGAGCGCGGAGCTGGATGTTGGGGCTCCCGCGCGG

DNAPTAQ .....C.....GG.....G... 1954  
 DNAPTFL .....T.....T.....G... 1951  
 DNAPTTH ...A.....A.....A..... 1960

MAJORITY AGGGCGTGGACCCCGTGTATGGCGCGGGCGGCGCAAGACCATCAACTTCGGGGTCCCTCTAGGGCATGTCCGGC

DNAPTAQ .....G... 2024  
 DNAPTFL ..A..G...A.....T.....G... 2021  
 DNAPTTH .....GG..G.....G..... 2030

MAJORITY GCACGGCGCTCTCGCAGGAGGCTTGGCATCCCCCTACGAGGAGGGGTGGCCCTTCATTGAGCGGCTACTTCCAG

DNAPTAQ .....A.....T.....CCA.....T... 2094  
 DNAPTFL .....GG.....T.....A..... 2091  
 DNAPTTH ...TA..G.....T...A.....A 2100

MAJORITY [SEQ IDNO:156] AGCTTCCCGAAGGTGCGGGCCTGGATTGAGAACAGCCCTGGAGGGAGGGAGGGGGGGTACGTGGAGA

[illegible]

MAJORITY CGCTCTCGGGCGGGGGCTACGTGGCGGACCTCAAGCCCGGGTGAAGACCGTGGGGGAGGGCGGGGA

DNAPTAQ	C	A	AG	G	C	2234
DNAPTFL	T				C	2231
DNAPTTH	AA	AA			CA	2240

MAJORITY GGGCATGGCGCTTCAACATGGCGCGTCCAGGGGACGGGGGGGAGGCTCATGAAGCTGGCCATGGTGAAGCTC

DNAPTAQ	.....	T.....	2304
DNAPTFL	.....G.....	.....GG...T	2301
DNAPTTH	.....	.....G.....	2310

**MAJORITY** TTCCCGCGGCTXCAGGAAATGGGGGGAGGATGCTCCTXCAGGTCACGAGGCTGGTCCTCGAGGGGG

DNAPTAQ	A	GG			T		2374
DNAPTEL	T		G		TT	G	2371
DNAPTH	G	C	G	G		GG	2380

MAJORITY CCAAGAGCGGGCGGCGGCGGCTTGGCGAAGGAGGTGATGGAGGGGCTCTATCGCCTGCCCGT

DNAPTAQ	A.....A.....GG.....GGG.....G.....	2444
DNAPTFL	.....G.C.....AG..A.....GG.....CAG..	2441
DNAPTHH	.....G.C.....C.....A.....G.....AA.C.....C.....	2450

# FIGURE 8H "000000" "000000"

MAJORITY [SEQ ID NO:156] GGGGCTGGAGGTGGAGGTGGGGAGGACTGGCTCTGGGGCAAGGAGTAG

DNAPTAQ [SEQ ID NO:153] .....A.....GA  
 DNAPTFL [SEQ ID NO:154] .....GC.....GT...  
 DNAPTTH [SEQ ID NO:155] .....T.....GT...

2499  
 2496  
 2505

MAJORITY [SEQ ID NO:159] MXAML PLFEPKGRVLLVDGHHLAYRTFFALKGLTTSRGEVPOAVYGFAKSLKALKEDG·DAVXVVVFDK

TAQ PRO [SEQ ID NO:157] RG.....H.....I..... 69  
 TFL PRO [SEQ ID NO:158].....V.V..... 68  
 TTH PRO [SEQ ID NO:1] E.....YK..F..... 70

MAJORITY APSFRHEAYKAGRAPTEDPFROLALI KELVDLLGLXRLEVPGEADDVLATLAKKAEKEGYEVRI L

TAQ PRO .....GG.....A.....S..... 139  
 TFL PRO .....V.....F.....R..... 138  
 TTH PRO .....FT..... 140

MAJORITY TADRDLYQLLSDRI AVLHPGEGLYITPAWLWEKYGLRPEQWVDYRALXGDPDSNLPGVKGI GEKTAXKLLX

TAQ PRO .....K.....H.....D..A.....T..E.....R...E 209  
 TFL PRO .....E..I.....Y.....A.....I.....QR..I R 208  
 TTH PRO .....V...V.....H...E.....F...V.....L...K 210

MAJORITY EWGSLNLLKNLDRVKP·XXREKI XAHMEDLXL SXXLSXVRTDLPLEVDFAXRREPDPREGLRAFLERLEF

TAQ PRO .....A.....L...AI...L...D..K..WD.AK.....K.....R..... 278  
 TFL PRO .....FQH..Q...SL...LQ.G..A.A..RK..Q.H.....GR..T.NL..... 277  
 TTH PRO .....ENV.....K..L...R..LE..R.....L.OG..... 280

MAJORITY GSLLHEFGLLXPKALEEAPWPPPEGAFVGFVLSRPEPMWAEALLA AARXGRVHRAXDPLXGLRDLKEV

TAQ PRO .....S.....K.....D.....G.....PE.YKA.....A 348  
 TFL PRO .....G..A.....L..SF.....G.WE..L...D...R.....G. 347  
 TTH PRO .....A.AP.....K...G.D.....A..A..K..... 350

MAJORITY	[SEQ ID NO:159]	RGLLAKDLAVLALREGLDLXPDDPMLLAYLLDPSNNTTPEGVARRYGGEWTEADAGERALLSERLFXNLXX
TAQ PRO	[SEQ ID NO:157]	S.....G.P.....E.....A.....A..WG 418
TFL PRO	[SEQ ID NO:158]	I.....F.E.....A.....QT..KE 417
TTH PRO	[SEQ ID NO:1]	S.....V.....AH.....HR..LK 420
MAJORITY	RLEGEERLLWLYXEVEKPLSRVLAHMEATGVRLDVAYVLOALSLEVAEEI(RR)LEEEVFRLAGHPFNLNSRD	
TAQ PRO	R.....R...A.....R.....A.....A..... 488	
TFL PRO	K.....E.....R.....EA.V.Q..... 487	
TTH PRO	K.....H.....L.....L..... 490	
MAJORITY	QLERVLFDELGLPAIGKTEKTGKRSTSAAVLEALBEAHPIVEKILQYRELTCLKNTYIDPLPXLVHPRTG	
TAQ PRO	.....S.....D.I..... 558	
TFL PRO	.....DR.....A....K.. 557	
TTH PRO	R...L...Q.....H.....V.....S..... 560	
MAJORITY	RLHTRFNQTATATGRSSSDPNLQNI PVRTPLQORIRRAFVAEEGWXLVALDYSQIELRVLAHLSGDENL	
TAQ PRO	.....I.....L..... 628	
TFL PRO	.....V..V..... 627	
TTH PRO	.....A..A..... 630	
MAJORITY	IRVFQEGRDIHTQTASWMFGVPPEAVDPLMRRAAKTINFGVLGMSAHRLSQELAI PYEEAVAFIERYFQ	
TAQ PRO	.....E.....R.....Q..... 698	
TFL PRO	.....S.G.....G..S..... 697	
TTH PRO	K.....V..... 700	

FIGURE 9C

MAJORITY	[SEQ ID NO:159]	SFPKVRAWI EKTLEEGRRRGYVETLFGRRRYVPDLNARVKSUREAAERMAFNMPVGGTAADLMKLA MVKL	
TAQ PRO	[SEQ ID NO:157]	.....E.....	768
TFL PRO	[SEQ ID NO:158]	.....G.....R.	767
TTH PRO	[SEQ ID NO:1]	.....K.....	770
MAJORITY	F PRLXEMGARM LQVHDELVL EAPKXRAEXVAALAKEVMEGVYPLAVPLEVEVGXGEDWLSAKEX		
TAQ PRO	.....E.....E.....A.....R.....I.....		833
TFL PRO	.....Q.L.....D.....R.....W.Q.....L.....		831
TTH PRO	.....R.....L.....QA.....E.....A.....KA.....M.....G		835

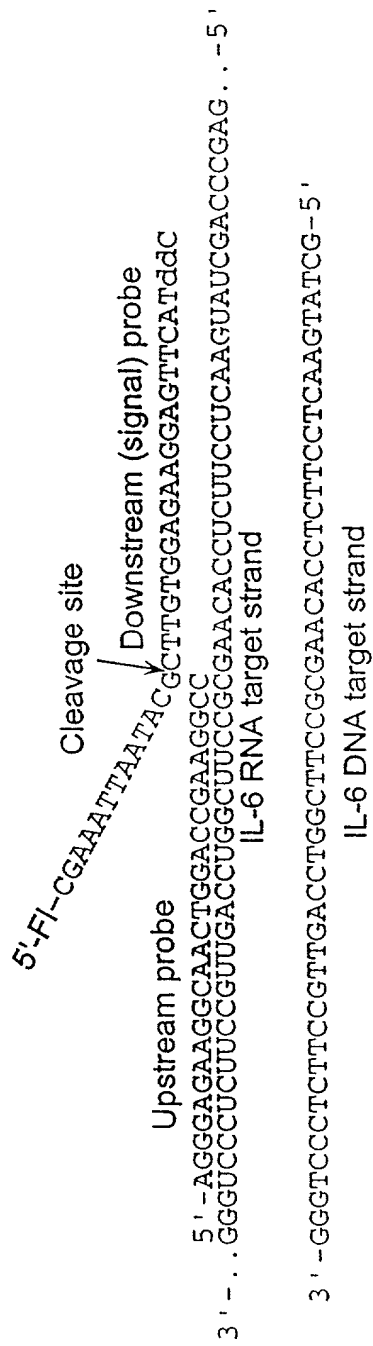


FIGURE 10

10084539.022600  
2008220"65048001

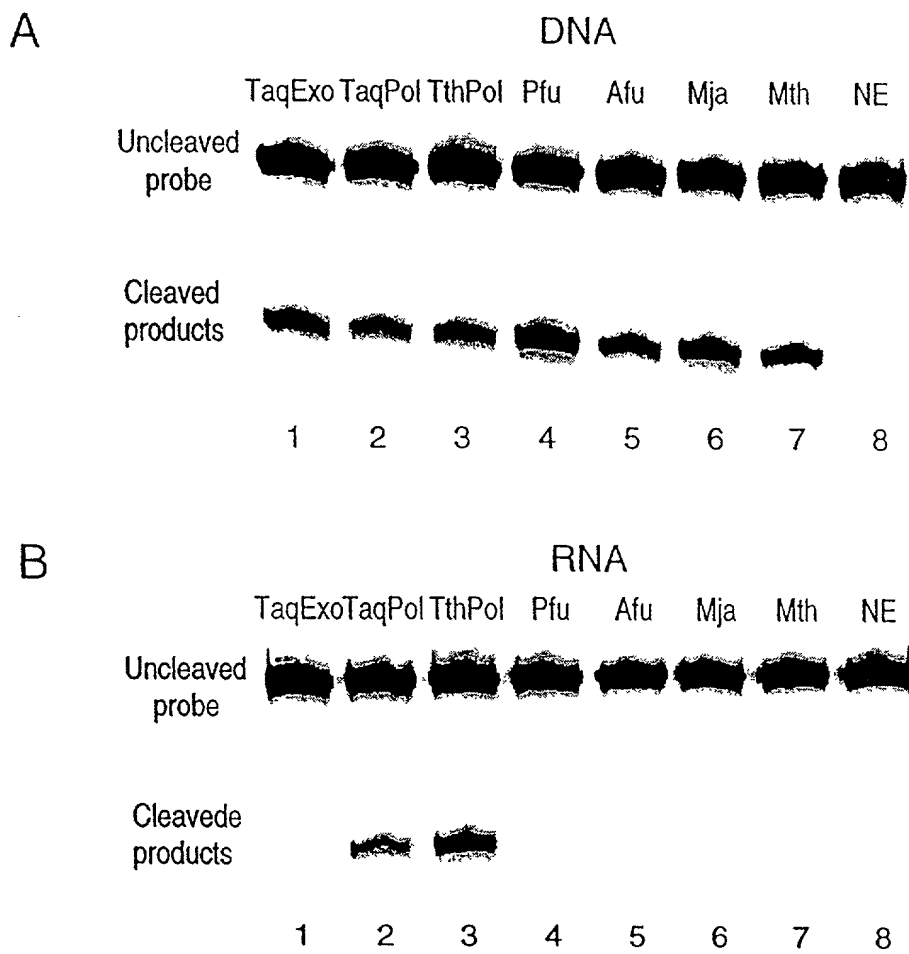


FIGURE 11

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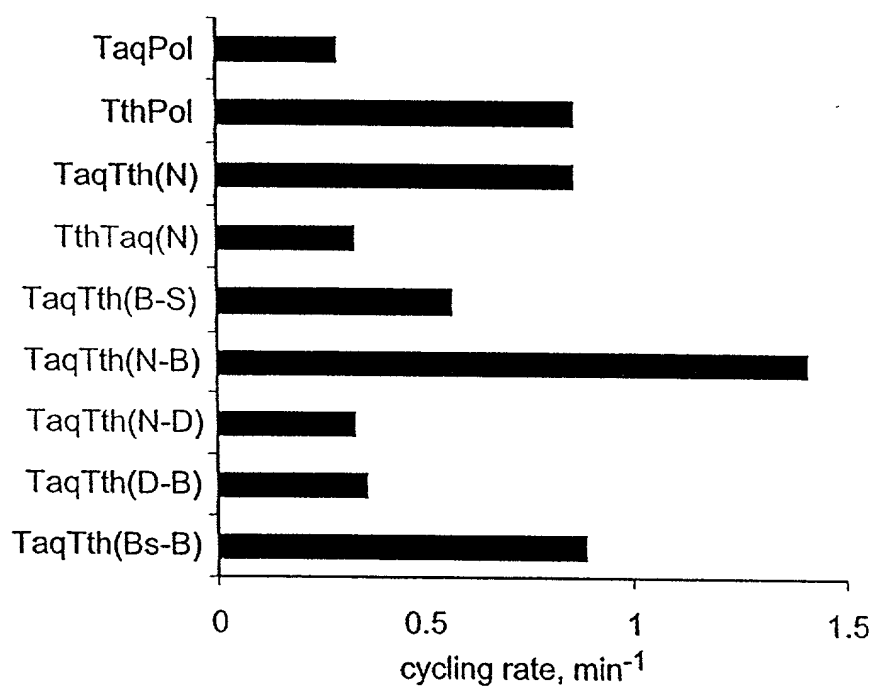


FIGURE 12

	BstBI (382)							NdeI (443)	
		390	400	410	420	430	440	450	460
1 TaqPol	DPSNTTPEGVARRYGGWTEEAGERRAALSERL								
2 TthPol	DPSNTTPEGVARRYGGWTEEAAERALLSERL								
		+		++	++		+	+	+
1 TaqPol	LEVAEEIIRLEAEVFRLAGHPFNLSRDQLERVLFD	470	480	490	500	510	520	530	540
2 TthPol	LELAEEIIRLEAEVFRLAGHPFNLSRDQLERVLFD								
	+	+	+		+	+			+
1 TaqPol	LKSTYIDPLPLIHPRTGRLHTRFNQTATATGRLSS	550	560	570	580	590			
2 TthPol	LKNTYVDPLPLVHPRTGRLHTRFNQTATATGRLSS								
	+	+	+						

FIGURE 13

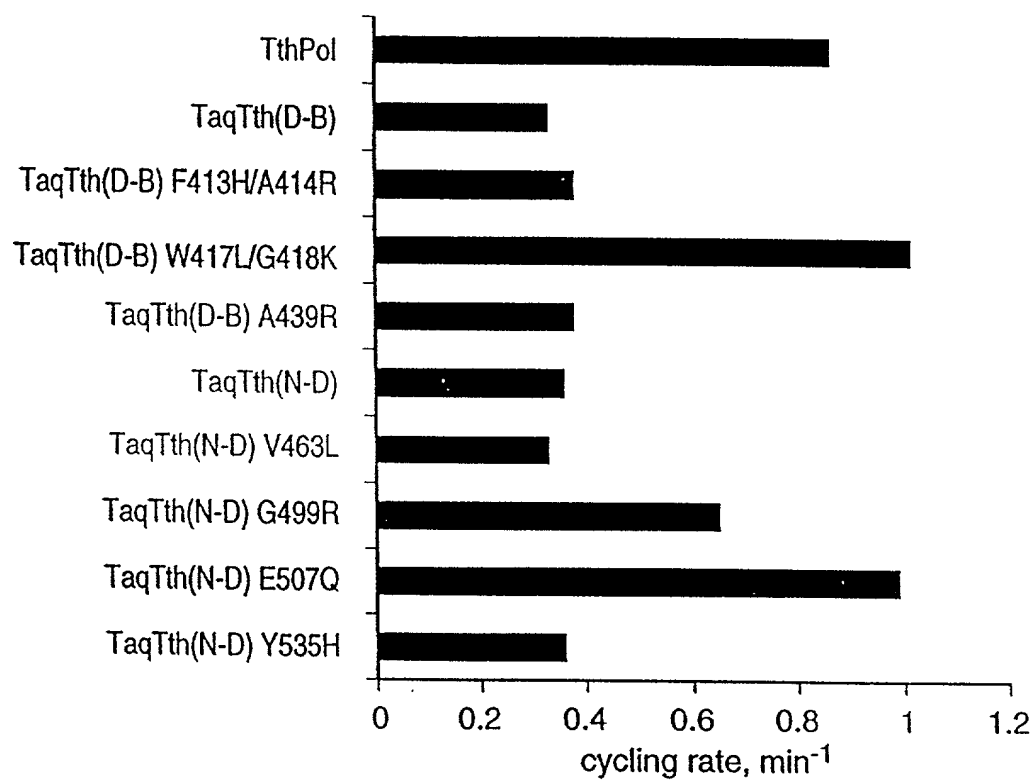


FIGURE 14

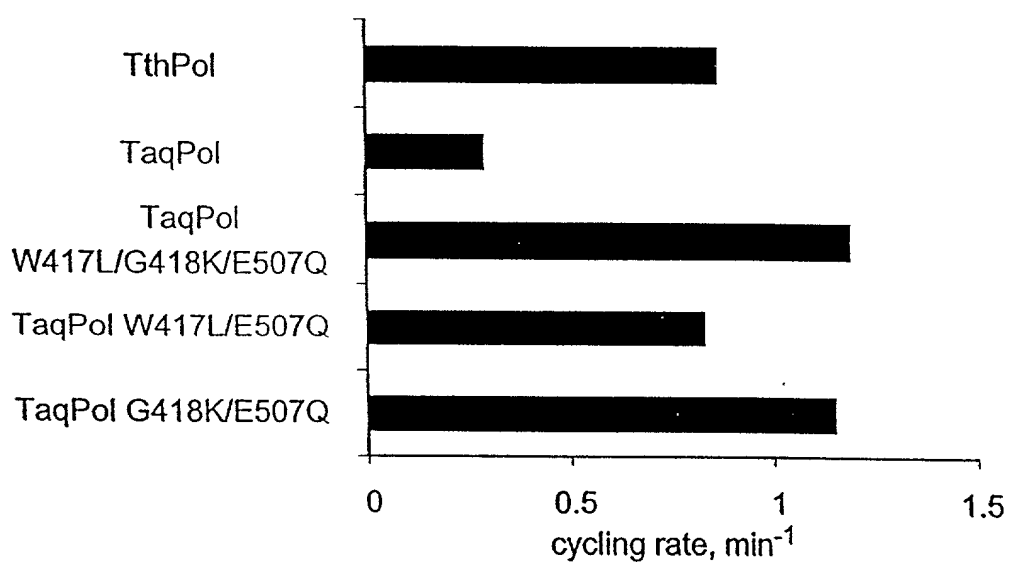


FIGURE 15





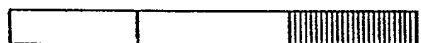
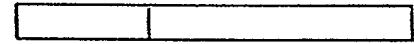
		Polymerase Activity Assays	
		<u>% Fl-labeled dUTP incorporated</u>	
		<u>RNA, p(A) or DNA, p(dA) Template</u>	
	Nuclease Domain      Polymerase Domain		
Tth		5.8 (1.00)	14.8 (1.00)
Taq		0.8 (0.14)	15.0 (1.01)
TaqTth(N)		4.88 (0.84)	12.9 (0.87)
TaqTth(N-B)		0.58 (0.10)	13.3 (0.90)
TaqTth(B-S)		6.60 (1.14)	14.9 (1.01)
Taq(W417L/G418K/E507Q)		0.42 (0.07)	12.6 (0.85)

FIGURE 16

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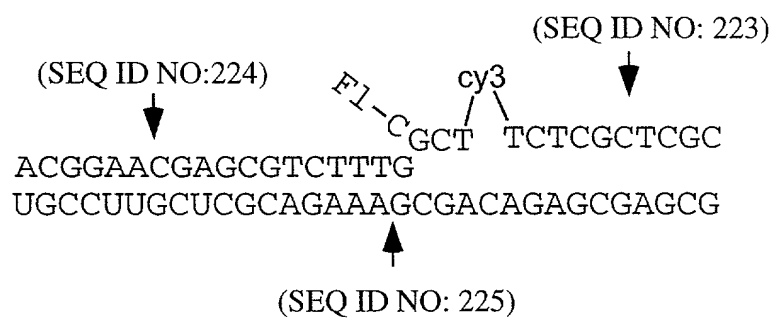


FIGURE 18A

(SEQ ID NO: 224)

↓

ACGGAACGAGCGTCTTTG

TGCCTTGCTCGCAGAAAGCGACAGAGCGAGCG

↑ (SEQ ID NO: 226)

(SEQ ID NO: 223)

↓

Fl-C<sub>GCT</sub> cy3

TCTCGCTCGC

28/





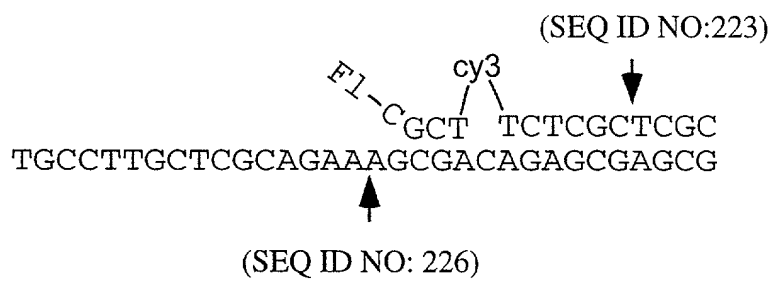


FIGURE 18D

	<u>Turnover Rate (1/min) (Relative Rate)</u>		
	<u>IL-6 RNA Invader Assay</u>	<u>Synthetic r25mer Invader Assay</u>	<u>Synthetic IrT1 Invader Assay</u>
<div> <div> Nuclease Domain Polymerase Domain </div> </div> <div> </div>	0.86 (1.00)	0.29 (1.00)	1.85 (1.00)
TthPol	0.29 (0.32)	0.03 (0.10)	0.05 (0.03)
TaqPol			
	0.86 (1.00)	0.45 (1.56)	3.36 (1.81)
TaqTth(N)			
	0.33 (0.38)	0.03 (0.10)	0.00 (0.00)
TthTaq(N)			
	0.57 (0.67)	0.07 (0.23)	0.15 (0.08)
TaqTth(B-S)			
	0.70 (0.79)	0.30 (1.05)	1.70 (0.92)
TthTaq(B-S)			
	1.41 (1.59)	0.40 (1.38)	3.22 (1.74)
TaqTth(N-B)			
	0.22 (0.25)	0.05 (0.18)	0.05 (0.03)
TthTaq(N-B)			
	0.22 (0.25)	0.10 (0.11)	0.06 (0.03)
TaqTth(N-Bs)			
	0.89 (1.04)	0.18 (0.63)	0.71 (0.38)
TaqTth(Bs-B)			
	0.33 (0.38)	0.08 (0.29)	0.18 (0.10)
TaqTth(N-D)			
	0.32 (0.42)	0.16 (0.54)	0.16 (0.09)
TaqTth(D-B)			

FIGURE 19

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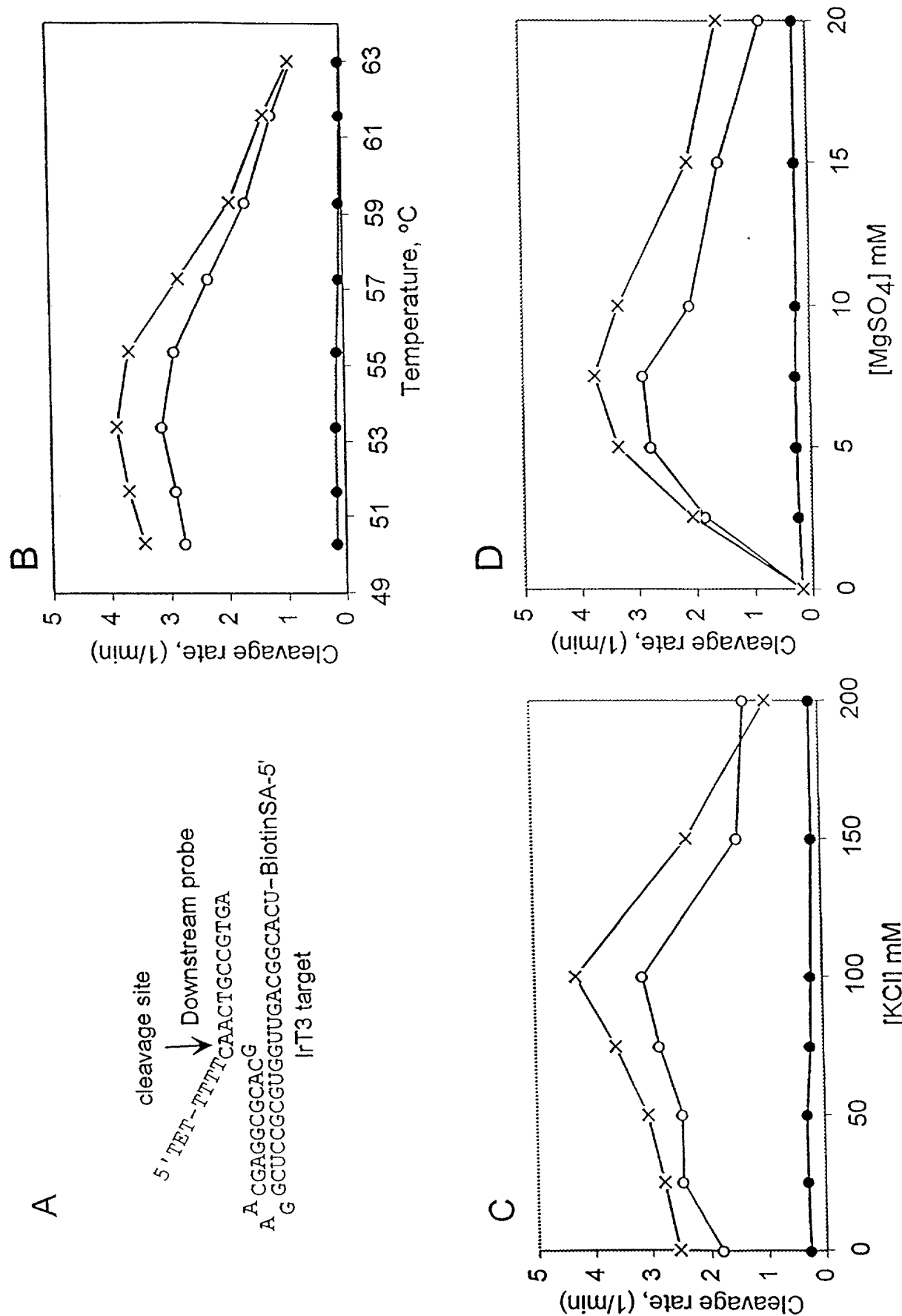


FIGURE 20

# FIGURE 21

A

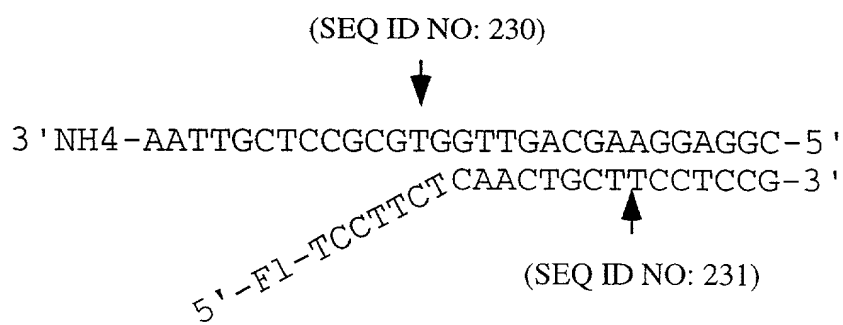
5'-tet-TTTTCAACTGCCGTGA  
<sup>A</sup>CGAGGCGCACG  
<sup>A</sup>GCTCCGCGTGGTTGACGGCACT

B

5'-tet-TTTTCAACTGCCGTGA  
<sup>A</sup>CGAGGCGCACG  
<sup>A</sup>GCUCCGCGUGGUUGACGGCACU-BiotinSA-5'

# FIGURE 22

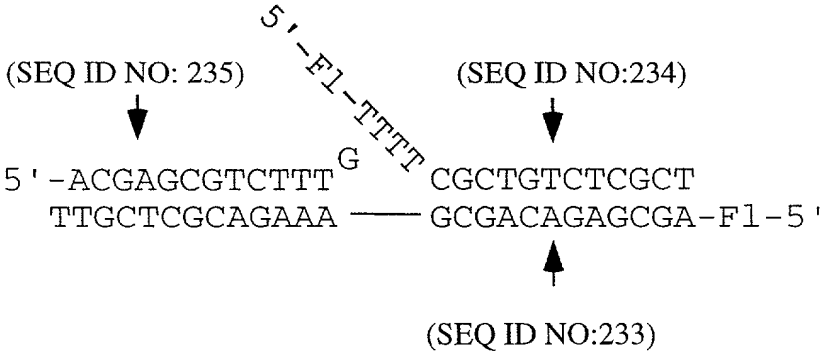
A



B

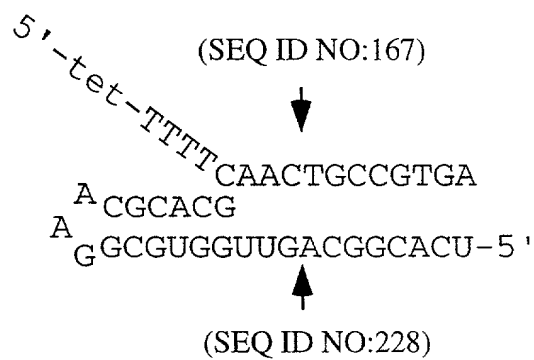


FIGURE 23



# FIGURE 24

A



B





FIGURE 25

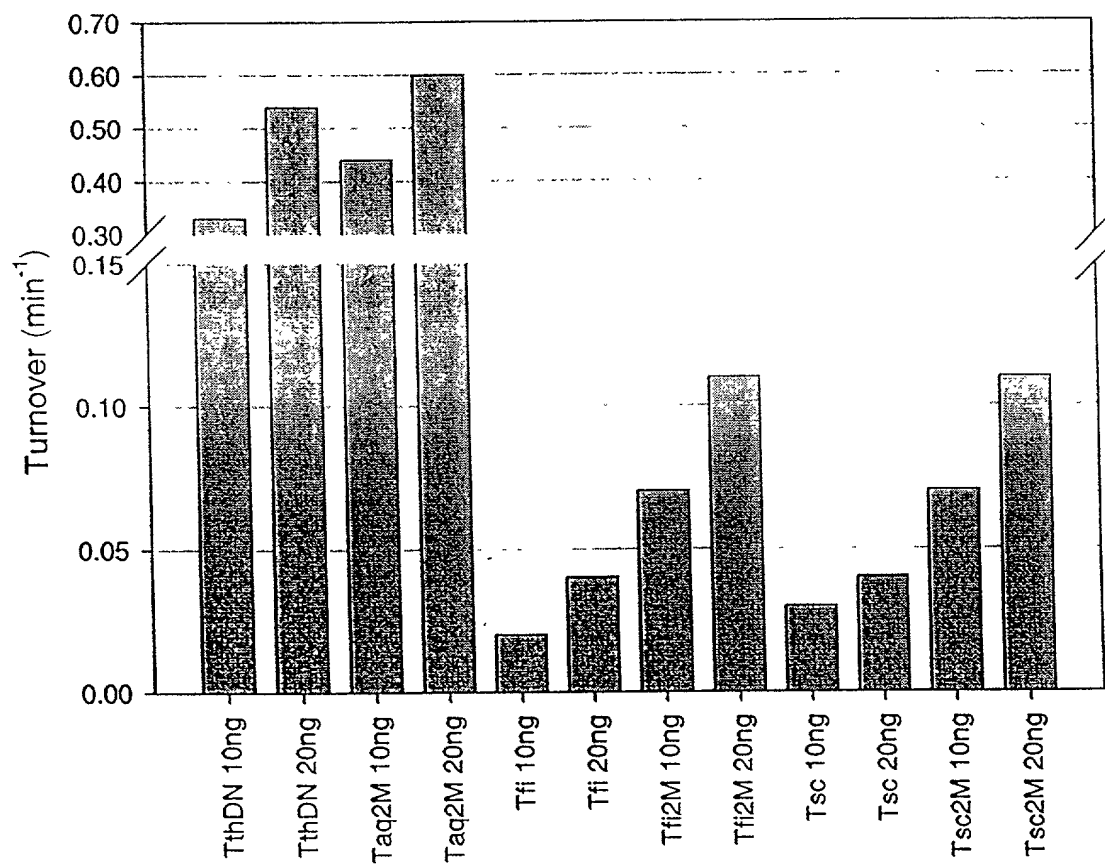


FIGURE 26

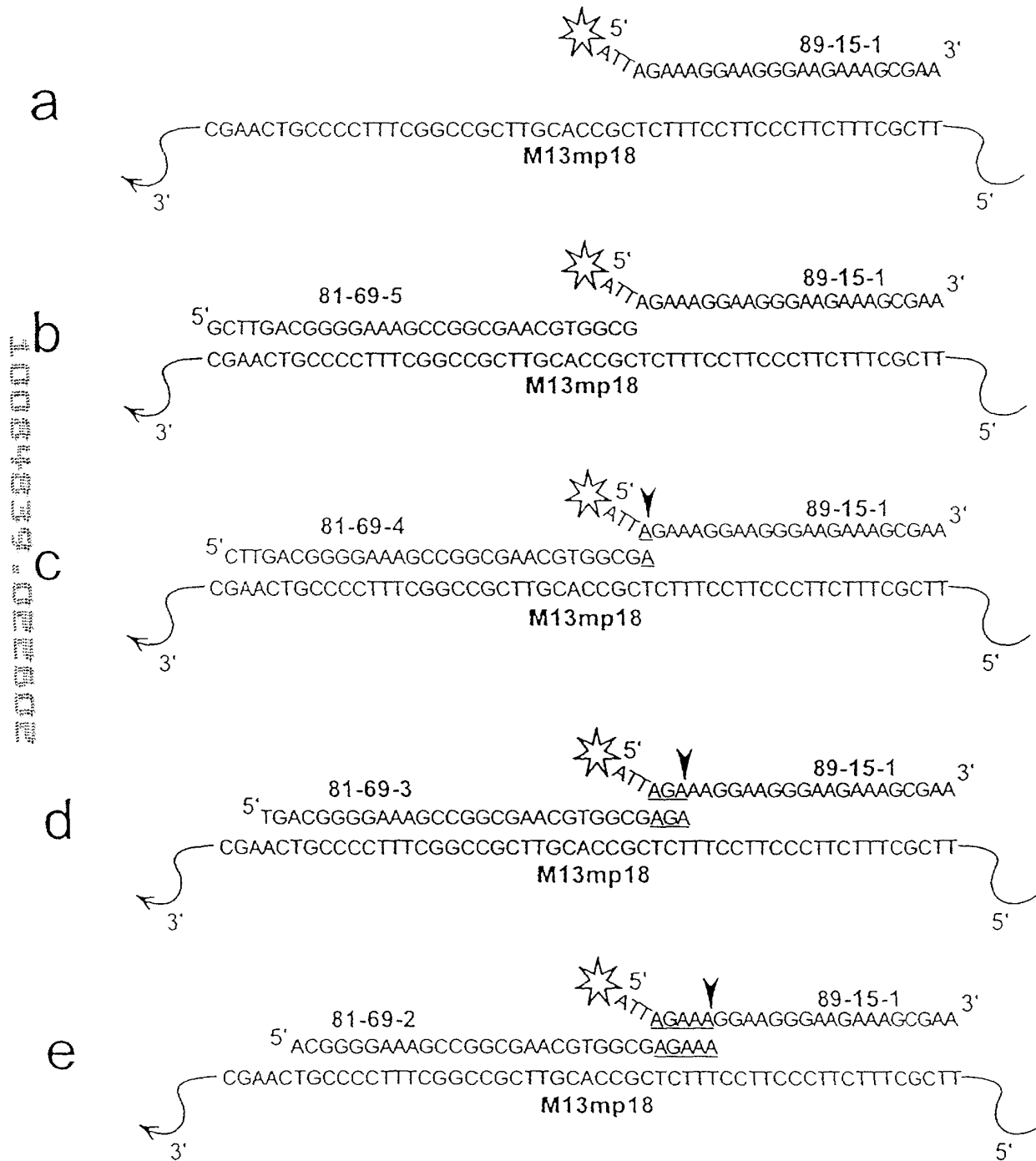


FIGURE 27

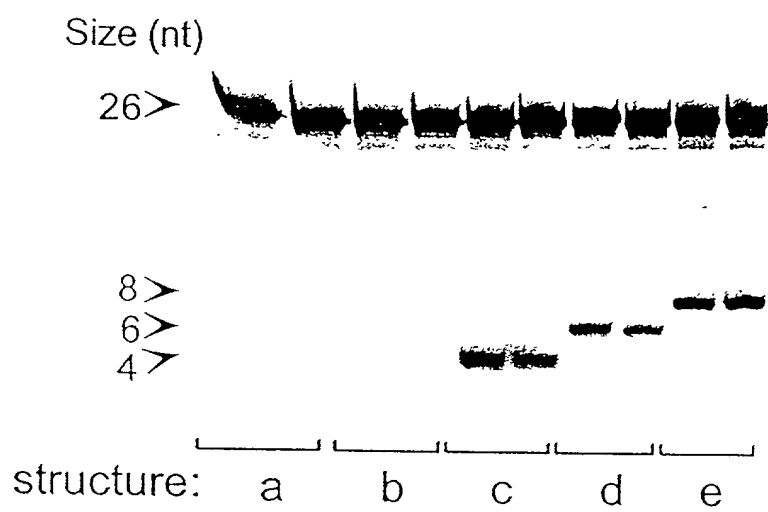
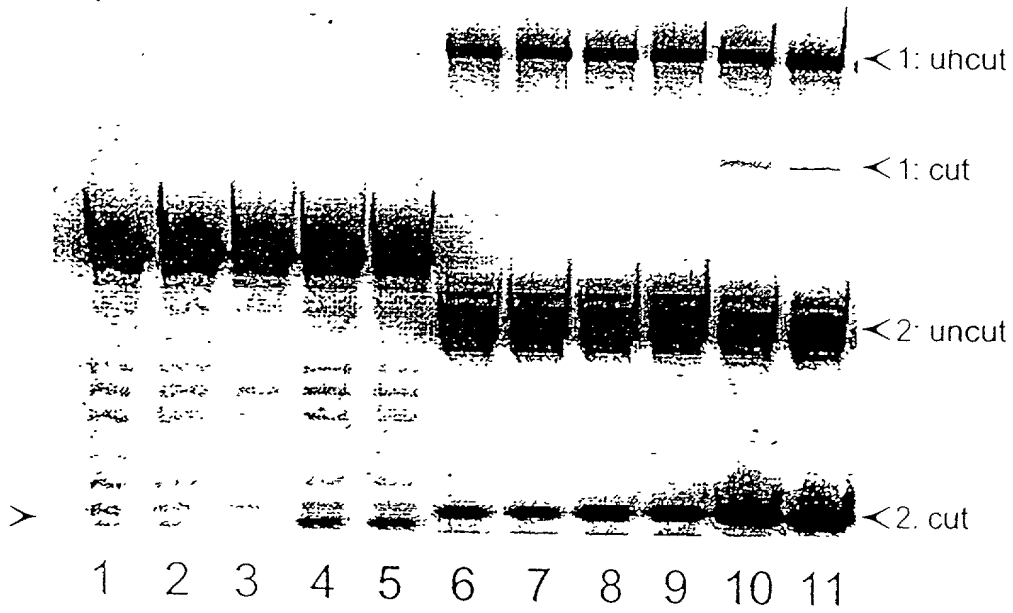


FIGURE 28

a



b

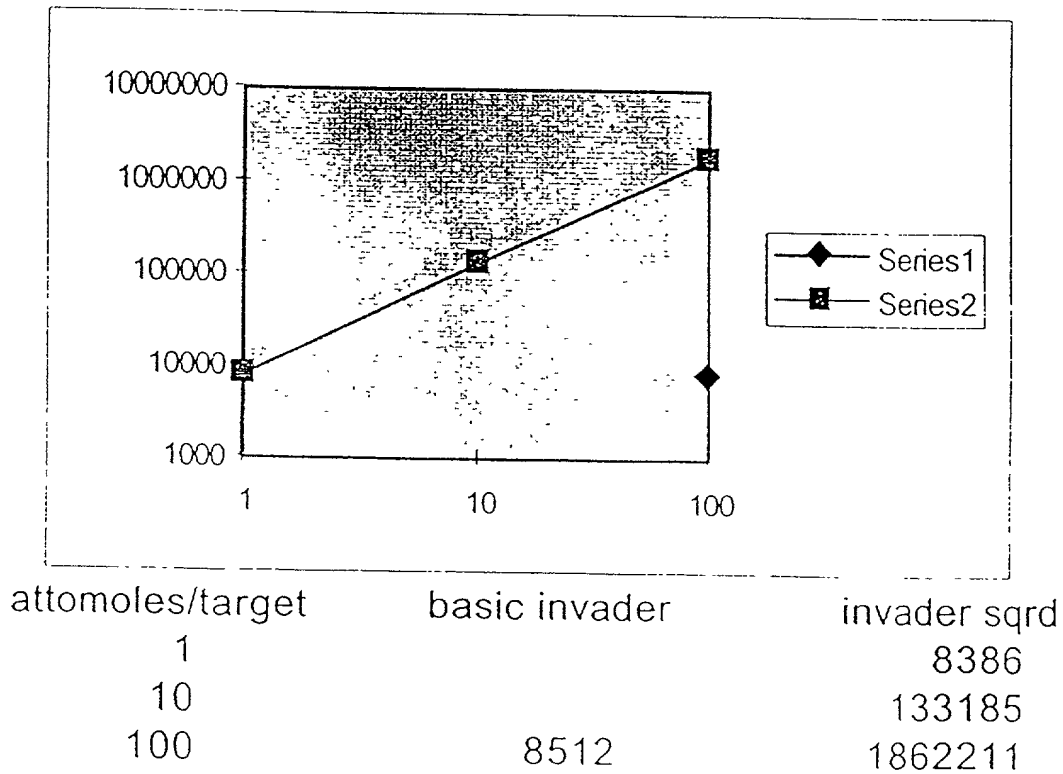


FIGURE 29

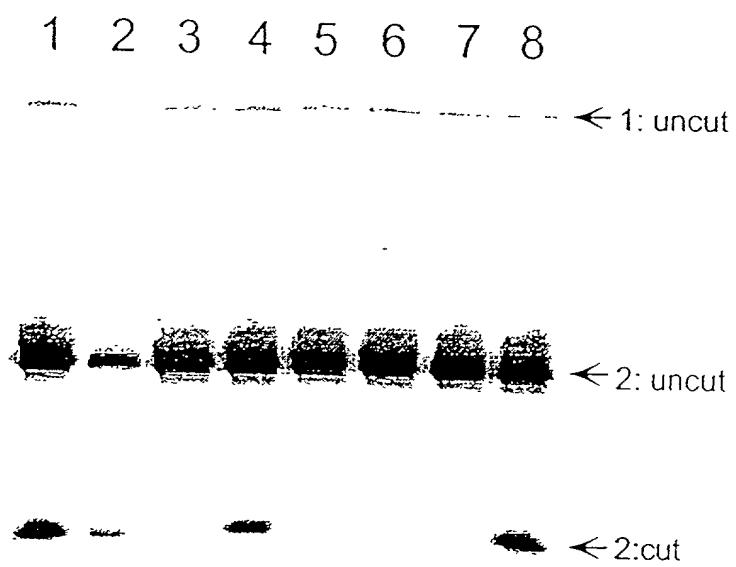


FIGURE 30

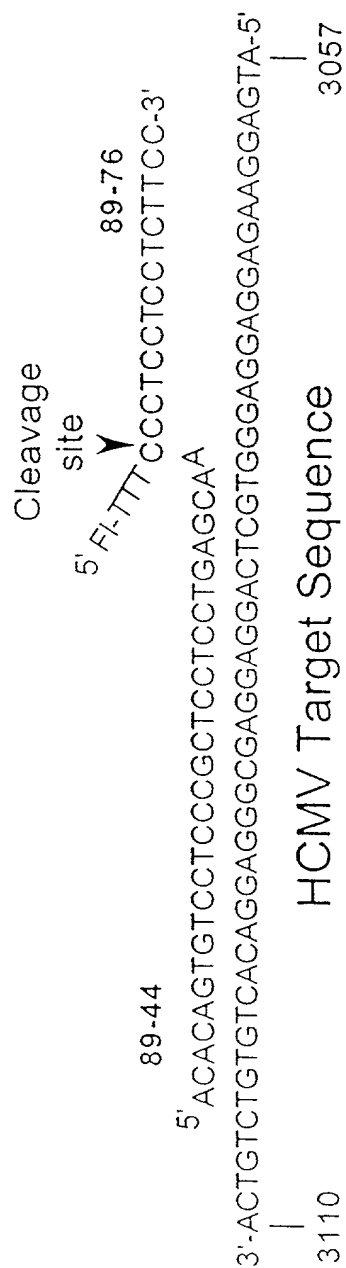
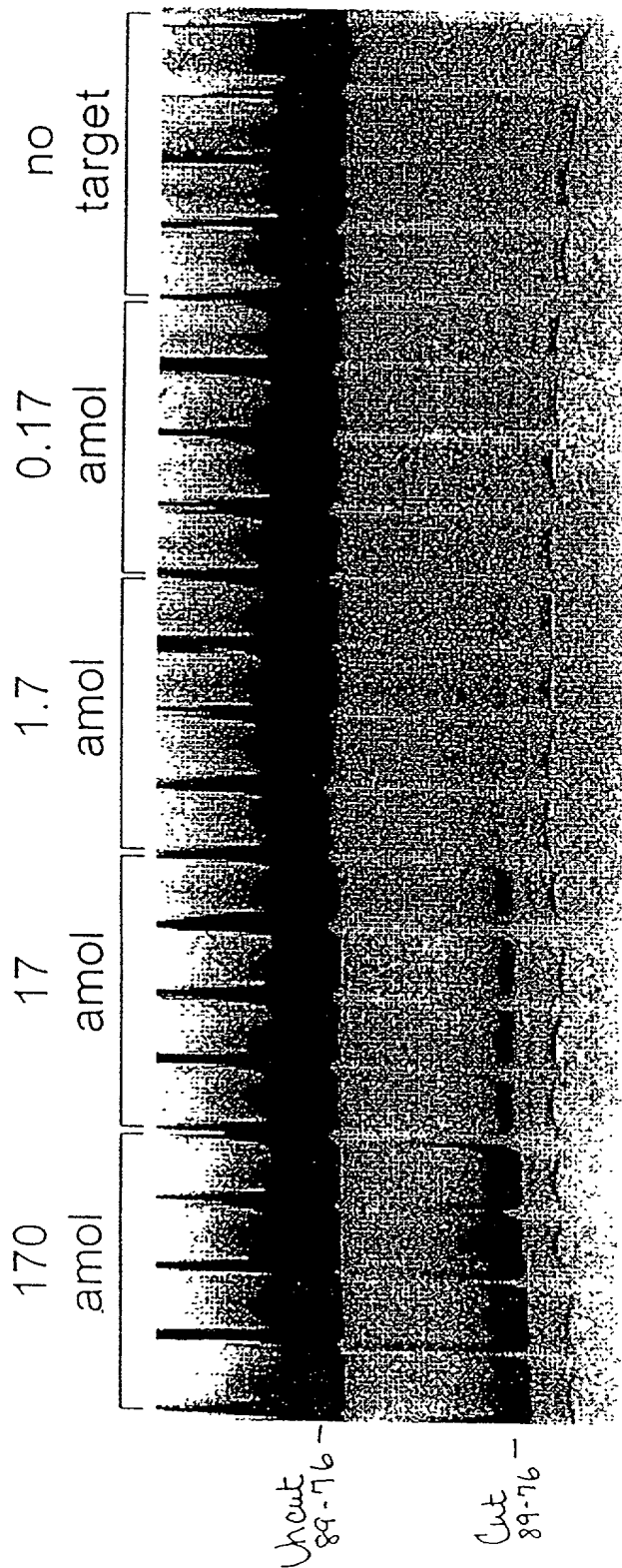


FIGURE 31



**FIGURE 32**  
Cleavage

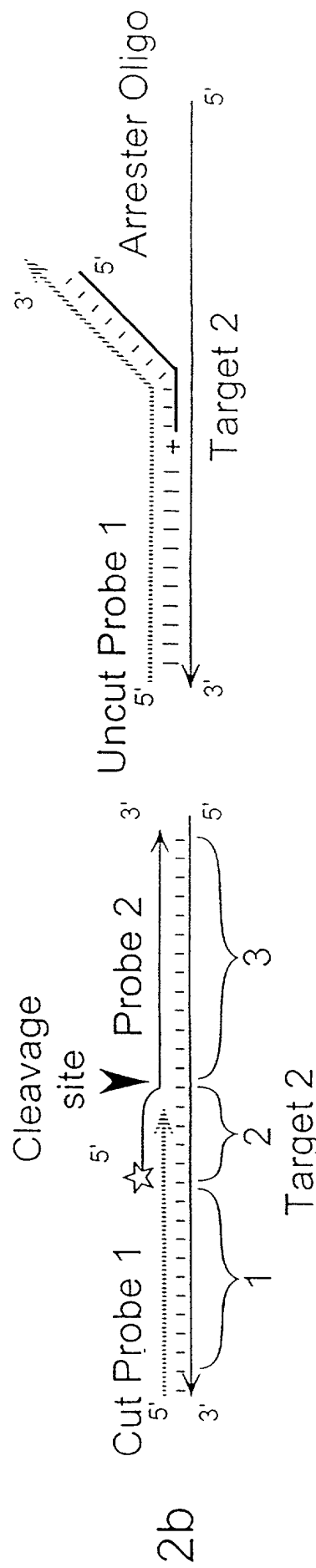
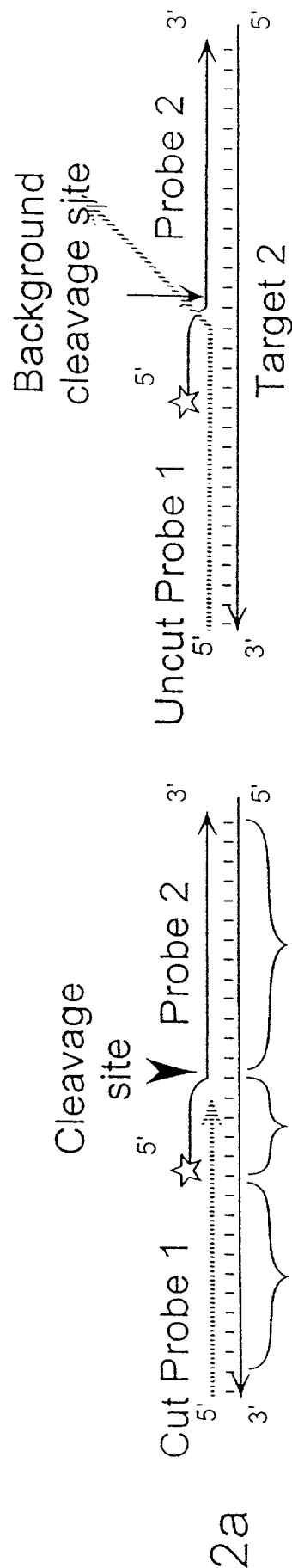
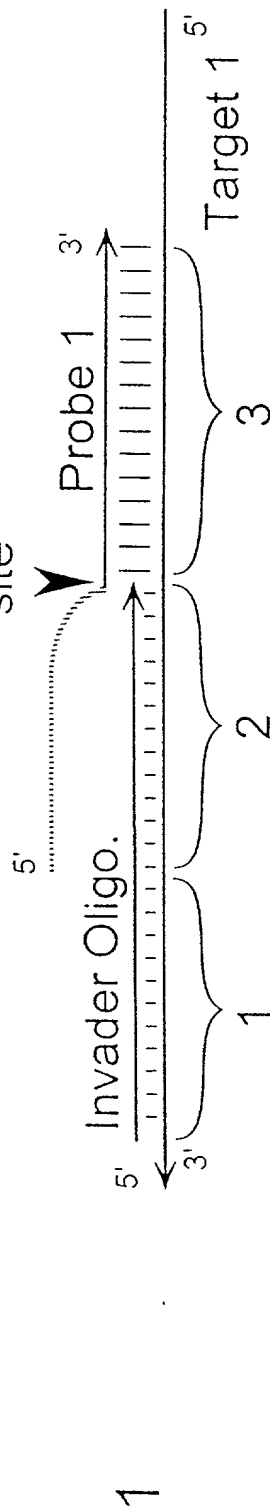
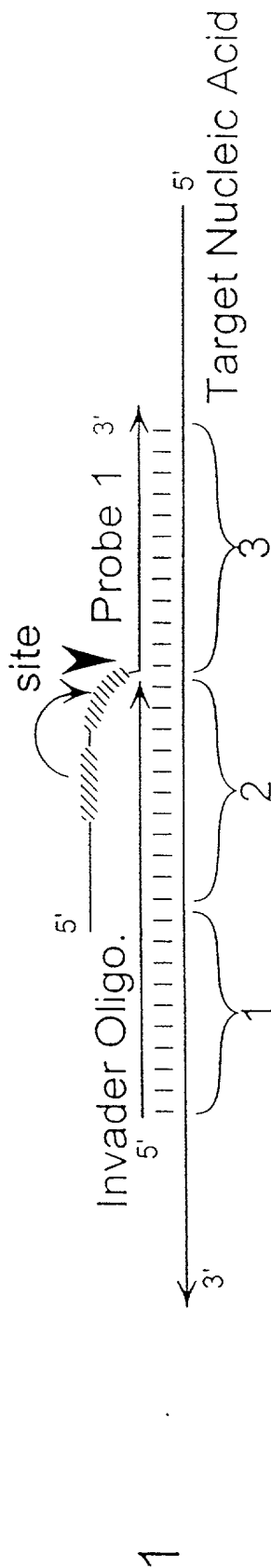




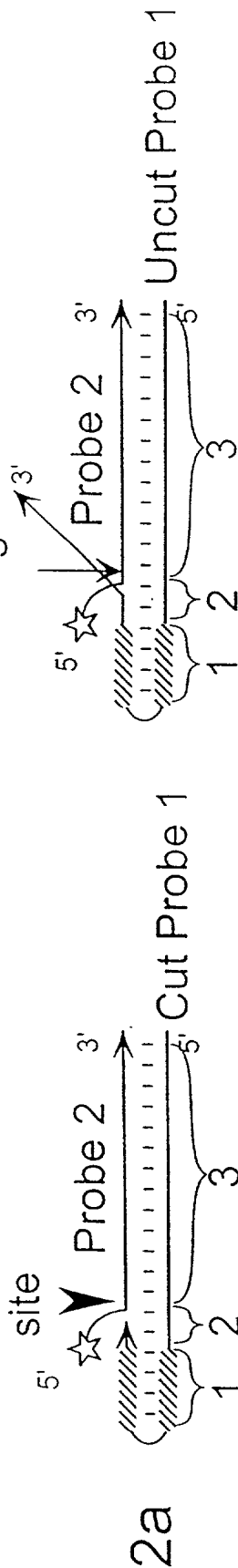
FIGURE 33

Cleavage site

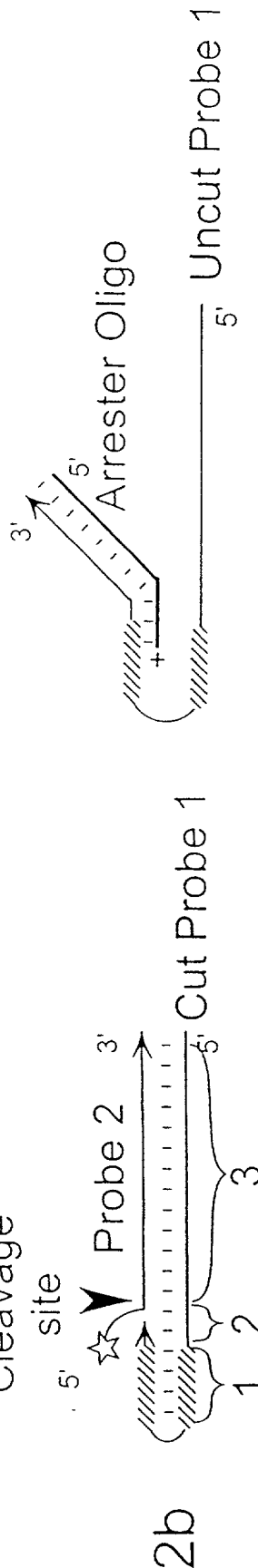


Background cleavage site

Cleavage site

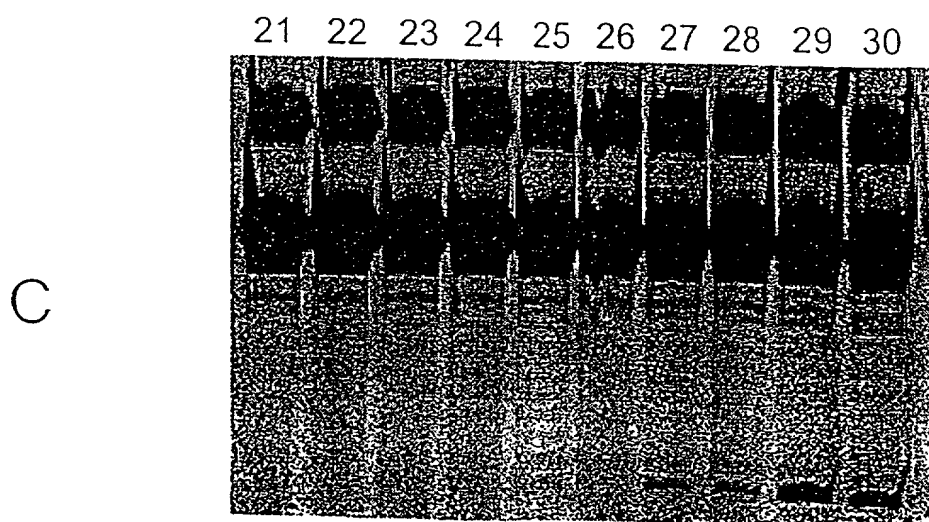
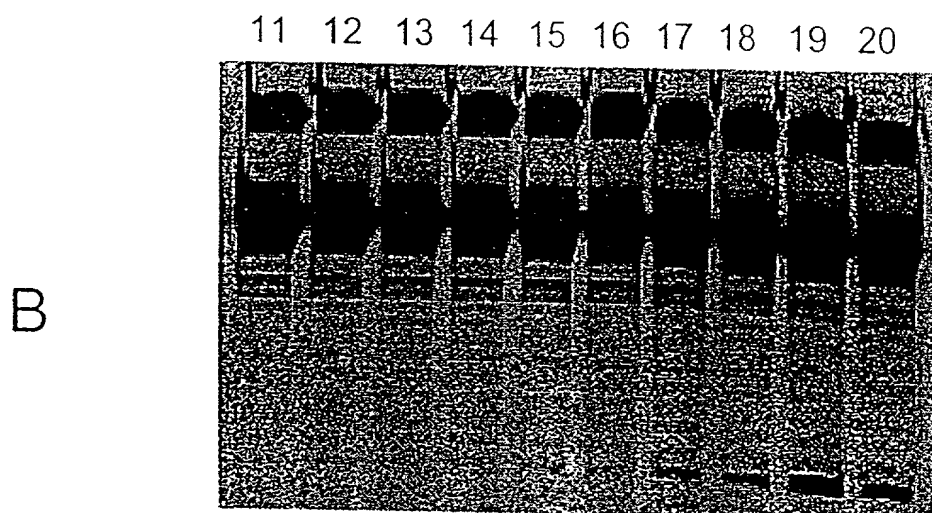
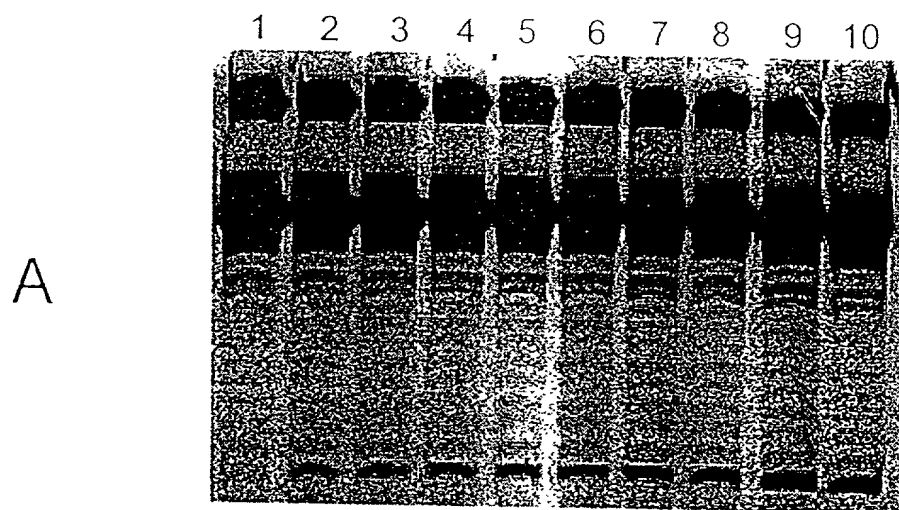


Cleavage site



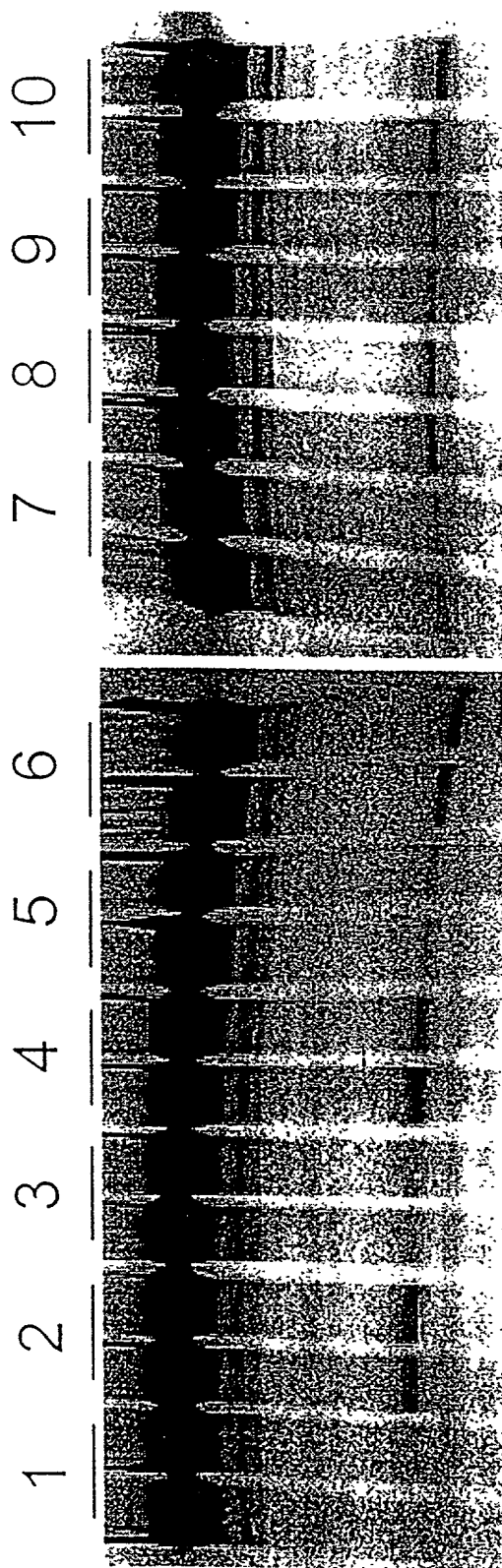
451

FIGURE 34



209220" 66240001

FIGURE 35A



209220" SEB4800T

FIGURE 35B

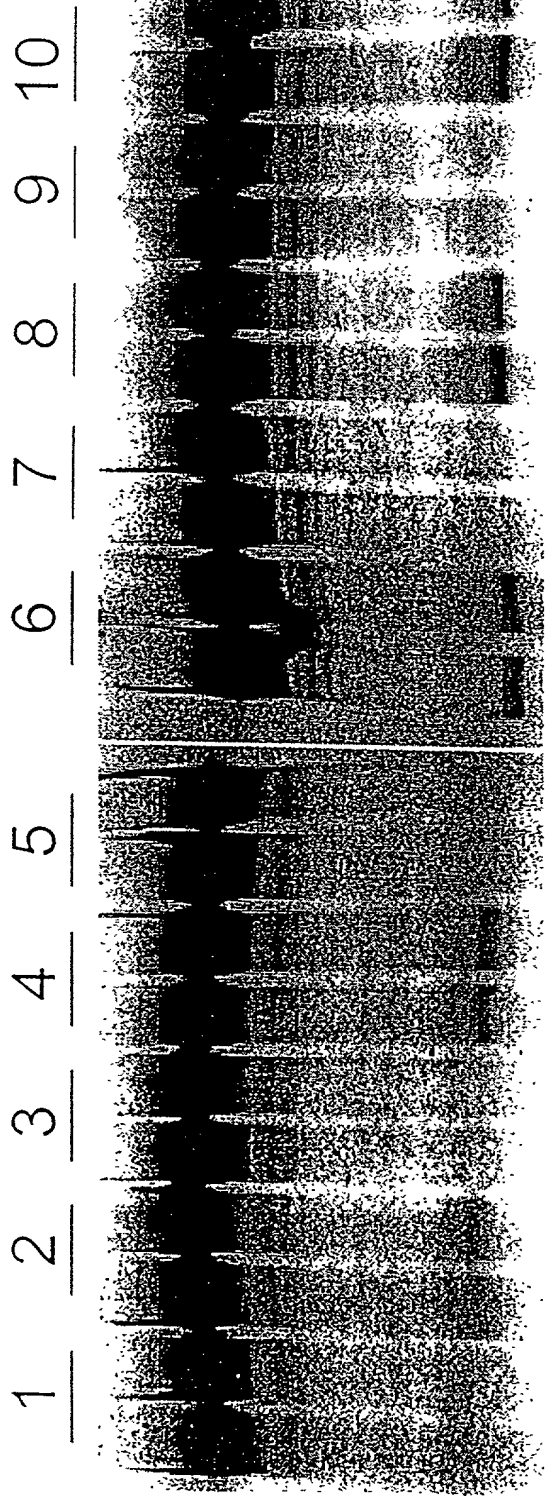


FIGURE 35C

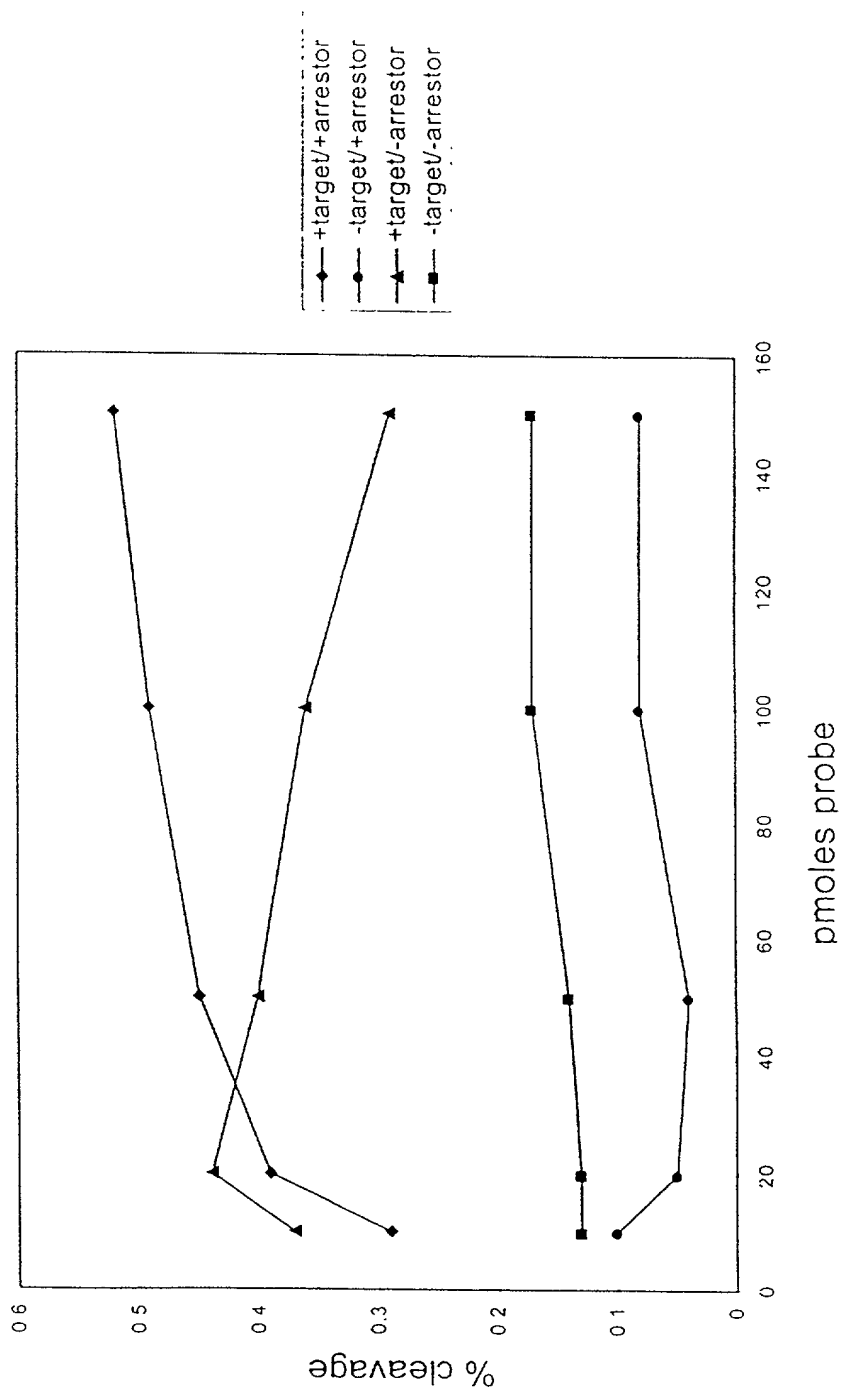


FIGURE 36A

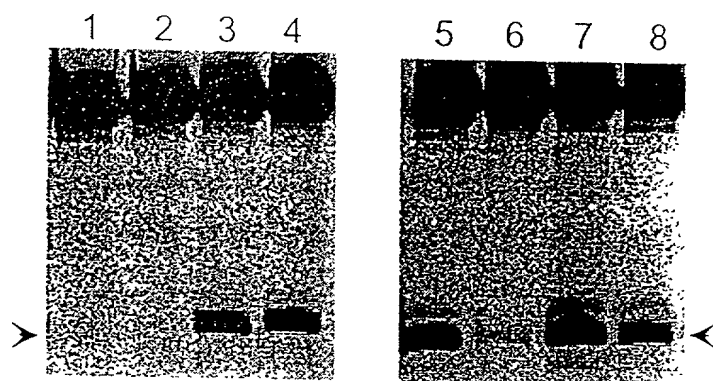
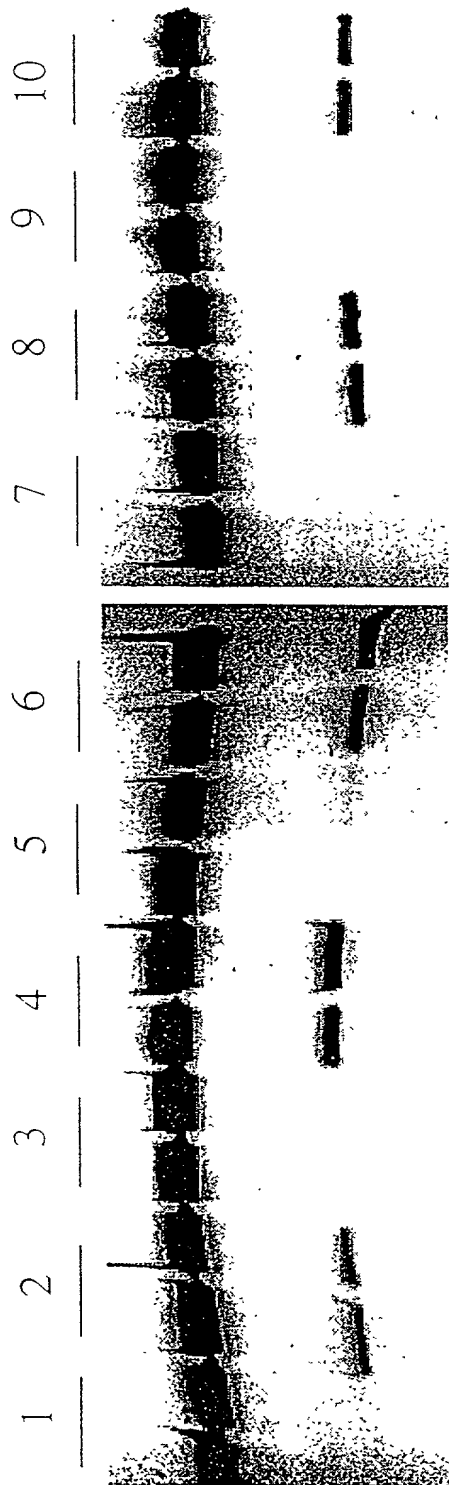


FIGURE 37B "SECRET"



2009220" BEH000T

FIGURE 36B

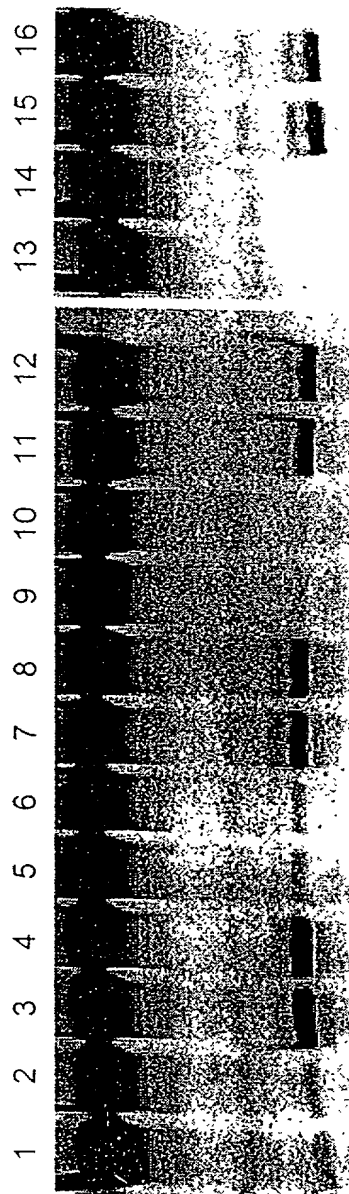




FIGURE 37A

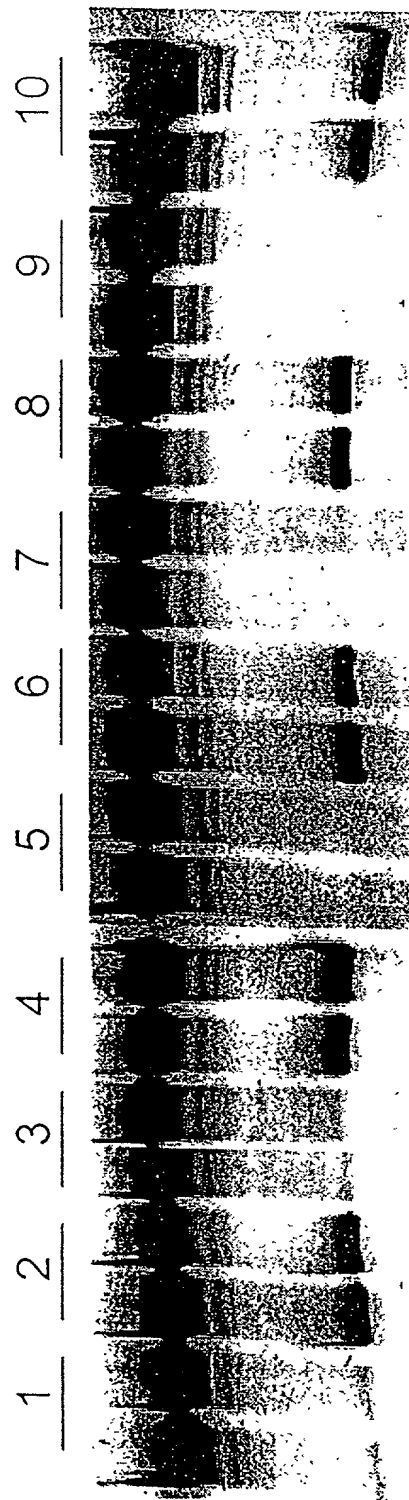
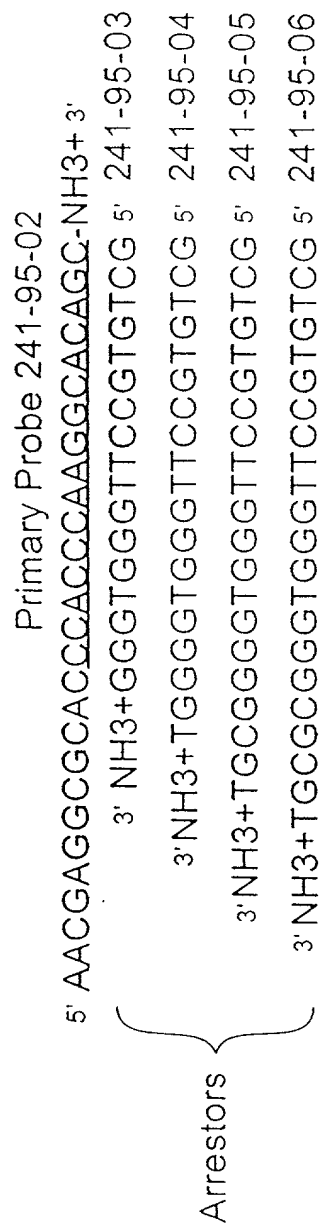


FIGURE 37C



209220" SESTH00T

FIGURE 38

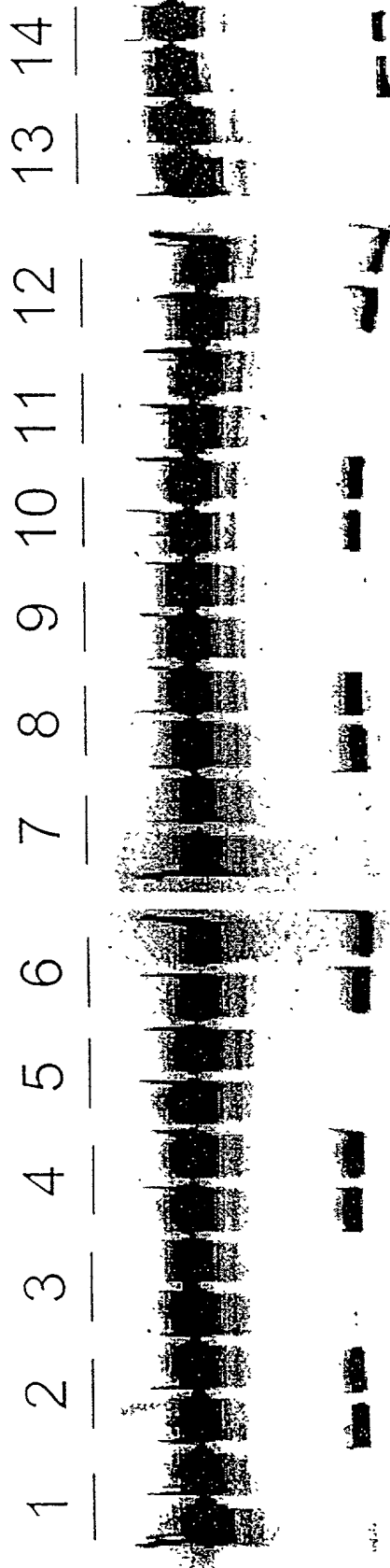


Figure 39

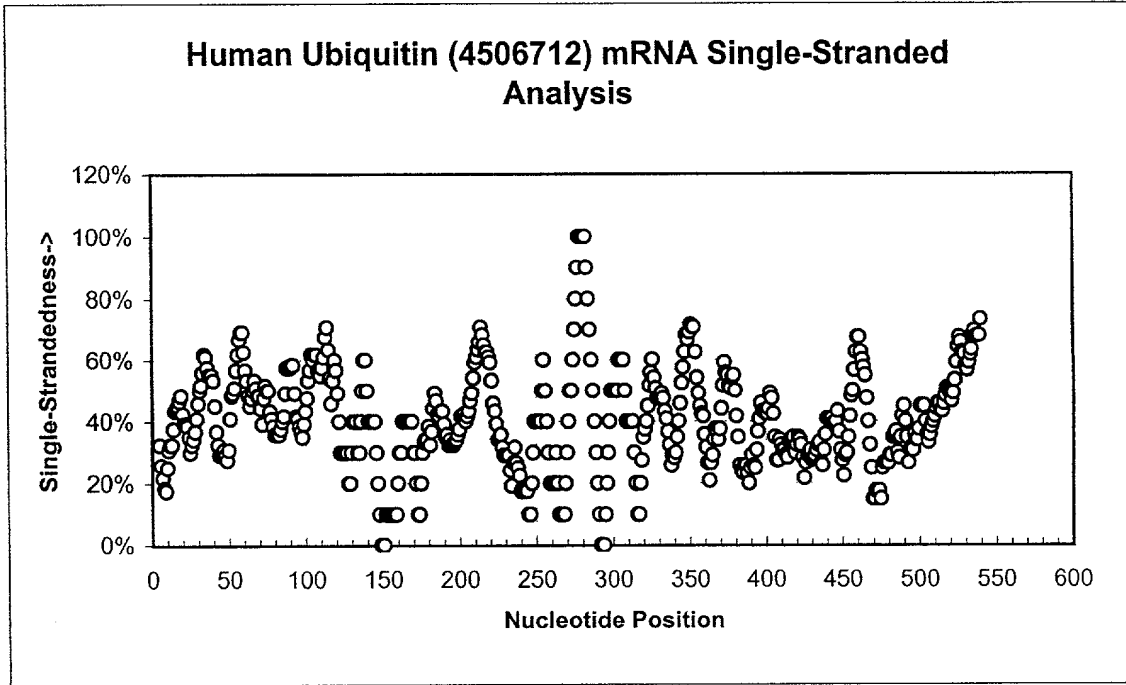




FIGURE 41

<b>hUbiquitin</b>	
Primary probe	5' -CGC CGA GAT CAC CTT TAC ATT TTC TAT CGT NH2-3' (SEQ ID NO:169)
INVADER oligonucleotide	5' -CCT TCC TTA TCC TGG ATC TTG GCA -3' (SEQ ID NO:170)
ARRESTOR oligonucleotide	5'-ACG ATA GAA AAT GTA AAG GTG ATC-3' (SEQ ID NO:171)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>m/r Ubiquitin, mouse (288C, 516C, 744C, 972C), rat (247C, 475C, 703C, 931C)</b>	
Primary probe	5'-CCG CCG AGA TCA CGG ATG TTG TAA TCA GAG A-NH2-3' (SEQ ID NO:174)
INVADER oligonucleotide 1	5'-GTG CAG GGT TGA CTC CTT CTC-3' (SEQ ID NO:175)
INVADER oligonucleotide 2	5'-GTG CAG GGT TGA CTC TTT CTC-3' (SEQ ID NO:176)
INVADER oligonucleotide 3	5'-GTG CAG GGT CGA CTC TTT CTC-3' (SEQ ID NO:177)
ARRESTOR oligonucleotide	5'-TCT CTG ATT ACA ACA TCC GTG ATC T-3' (SEQ ID NO:178)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>r/m GAPDH, rat (150C), mouse(166C)</b>	
Primary probe	5'-CGC CGA GAT CAC GTA GTT GAG GTC AAT GA-NH2-3' (SEQ ID NO:179)
INVADER oligonucleotide	5'-GAA TCA TAC TGG AAC ATG TAG ACC ATC-3' (SEQ ID NO:180)
ARRESTOR oligonucleotide	5'-TCA TTG ACC TCA ACT ACG TGA TCT-3' (SEQ ID NO:181)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)
<b>hGAPDH, 516C</b>	
Primary probe	5'-CCG CCG AGA TCA CGA TGA TCT TGA GGC T-NH2-3' (SEQ ID NO:182)
INVADER oligonucleotide	5'-TGG TGC AGG AGG CAT TGC TC-3' (SEQ ID NO:183)
ARRESTOR oligonucleotide	5'-CAG CCT CAA GAT TAC CGT GAT CT-3' (SEQ ID NO:184)
FRET Probe	5'-RED-CTC (Z28) TTC TCA GTG CG-3' (SEQ ID NO:172)
Secondary target	5'-CGC AGT GAG AAT GAG GTG ATC TCG GCG GT-3' (SEQ ID NO:173)

58-

## hTGF-β

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAC GGC TC -3'  
5'-AGG CGA AAG CCC TCA ATT TCC CA-3'  
5'-AAC CAC TGC CGC ACA-3'  
5'-GAG CCG TGG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:185)  
(SEQ ID NO:186)  
(SEQ ID NO:187)  
(SEQ ID NO:188)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hMCP-1

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTT CGG AGT TTG GG NH2 -3"  
5'-GGG TTG TGG AGT GAG TGT TCA AGT A -3'  
NO STACKER  
5'-GGG-AA-CTC-CGA-AGG- AGG-CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:191)  
(SEQ ID NO:192)  
(SEQ ID NO:193)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hTNF-α

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC TCT GAC TGC CA NH2-3'  
5'-TTG TCA CTC GGG GTT CGA GAA GAT GAA-3'  
5'-GGG CCA GAG GG-3'  
5'-AGG CAG TCA GAG AGG CG-3'  
5'-FL-CAC-Z28-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:194)  
(SEQ ID NO:195)  
(SEQ ID NO:196)  
(SEQ ID NO:197)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-6

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CTC ATT GAA TTNH2-3'  
5'-CCA AAA GTC CAG TGA TTT TCA CCA GGC AAG TA -3'  
5'-CAG ATT GGA AGC ATC CAT CT-3'  
5'-GAT TCA ATG AGG AGG AGG C-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:198)  
(SEQ ID NO:199)  
(SEQ ID NO:200)  
(SEQ ID NO:201)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

hIL-1 $\beta$ 

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CAT CTG TTT AGG NH2-3'  
5'-CAG GTC CTG GAA GGA GCA CTT A-3'  
5'-GCC ATC AGC TTC TTT GTT CTT GTC ATC-3'  
5'-GCC CTA AAC AGA TGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:202)  
(SEQ ID NO:203)  
(SEQ ID NO:204)  
(SEQ ID NO:205)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC CAG TTG TAG NH2 -3'  
5'-AAA ATC ATC TGT AAA TCC AGC AGT AAA TGA -3'  
5'-CTG TGT TTT CTT TGT AGA AC -3'  
5'-CTA CAA CTG GAG GAG GC -3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:206)  
(SEQ ID NO:207)  
(SEQ ID NO:208)  
(SEQ ID NO:209)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-8

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC TCA GTT CT-NH2-3'  
5'-GTG TGG TCC ACT CTC AAT CAA -3'  
5'-TTG ATA AAT TTG GGG TGG AAA GGT TTG GA-3'  
5'-AGA ACT GAG AGG AGG CG-3'  
5'-FL-CAC-(Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:210)  
(SEQ ID NO:211)  
(SEQ ID NO:619)  
(SEQ ID NO:620)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hIL-10

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CAA ACT CAC TCA T-NH2-3'  
5'-GTC ATG TAG GCT TCT ATG TAG TTG ATG AAG ATG TA-3'  
5'-GGC TTT GTA GAT GCC TTT CTC TTG GA-3'  
5'-ATG AGT GAG TTT GGT GCG-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:621)  
(SEQ ID NO:622)  
(SEQ ID NO:623)  
(SEQ ID NO:624)  
(SEQ ID NO:189)  
(SEQ ID NO:625)



# hIL-4

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT GGA GGC A-NH2-3'  
5'-AAG GTT TCC TTC TCA GTT GTG TTA-3'  
5'-GCA AAG ATG TCT GTT ACG GTC AAC TC-3'  
5'-TGC CTC CAA GGT GCG C-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:626)  
(SEQ ID NO:627)  
(SEQ ID NO:628)  
(SEQ ID NO:629)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

# hIFN-γ

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CTT CAA AAT GCC TAA-NH2-3'  
5'-TGT CAC TCT CCT CTT TCC AAT TA-3'  
5'-GAA AAG AGT TCC ATT ATC CGC TAC ATC TG-3'  
5'-TTA GGC ATT TTG AAG GTG CGC-3'  
5'-FL-CAC (Z28)-TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:630)  
(SEQ ID NO:631)  
(SEQ ID NO:632)  
(SEQ ID NO:633)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 1A2, 1193G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TGT GTC CC-NH2-3'  
5'-**GGG** ATG TAG AAG CCA TTC AGA-3'  
5'-TTG TTG TGC TGT GGG GGA TG-3'  
5'-**GGG** ACA CAA **CGG** TGC **GC**-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG **TTT**-3'

(SEQ ID NO:634)  
(SEQ ID NO:635)  
(SEQ ID NO:636)  
(SEQ ID NO:637)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2B6, 343G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3'  
5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3'  
5'-**CGG** AAG AAT **GGG** TCG **ACC** ATG-3'  
5'-**GGG** ATA TGG TGG AGG **CG**-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC **GGT**-3'

(SEQ ID NO:638)  
(SEQ ID NO:639)  
(SEQ ID NO:640)  
(SEQ ID NO:641)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

### hCYP 2C19, 223G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGT TCC AGG C-NH2-3'  
5'-CAT ATC CAT GCA GCA CCA CCA TGA-3'  
5'-CAA AAT ACA GAG TGA ACA CAG GGC C-3'  
5'-**GCC** TGG **AAC** **GGT** **GCG** C-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG **TTT**-3'

(SEQ ID NO:642)  
(SEQ ID NO:643)  
(SEQ ID NO:644)  
(SEQ ID NO:645)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

### hCYP 2C9, 1554T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ATG GAT AAT GCC C-NH2-3'  
5'-CAG GTG AGA AAA GGC ATT ACA GAT AGT GAA AGC-3'  
5'-CAG AGG AAA GAG AGC TGC AGG G-3'  
5'-**GGG** CAT TAT **CCA** TGA **GGC** G-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC **GGT**-3'

(SEQ ID NO:646)  
(SEQ ID NO:647)  
(SEQ ID NO:648)  
(SEQ ID NO:649)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 2D6, 1316G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CCT GCT GAG AAA-NH2-3'  
5'-CCC GAG GCA TGC ACG GCG GA-3'  
5'-GGC AGG AAG GCC TCC-3'  
5'-TTT CTC AGC AGG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:650)  
(SEQ ID NO:651)  
(SEQ ID NO:652)  
(SEQ ID NO:653)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 3A4, 309C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC GCC CCA CA-NH2-3'  
5'-CAG CAC AGG CTG TTG ACC ATC ATA AAA C-3'  
5'-CTT TTC CAT ACT TTT TAT GAC ATT C-3'  
5'-TGT GGG GCG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:654)  
(SEQ ID NO:655)  
(SEQ ID NO:656)  
(SEQ ID NO:657)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## hCYP 3A5 v2, 323T

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGT TGA CCT TC-NH2-3'  
5'-GTG ATG GCC AGC ACA GGG C-3'  
5'-ATA CGT TCC CCA CAT TTT TC-3'  
5'-TGA AGG TCA ACT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:658)  
(SEQ ID NO:659)  
(SEQ ID NO:660)  
(SEQ ID NO:661)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## hCYP 3A7, 231C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'  
5'-GCC AGC ATA GGC TGT TGA CAC-3'  
5'-AGA CTT TTC TAT ACT TTT TAT AAC ATT C-3'  
5'-GGG GTA TTT ATG ACG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:662)  
(SEQ ID NO:663)  
(SEQ ID NO:664)  
(SEQ ID NO:665)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

**h/rCYP 1A1 (human: 937, rat 863G)**

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTG TCT GTG AT-NH2-3'  
5'-TCC TGA CAG TGC TCA ATC AGG A-3'  
5'-TCC TGA CAA TGC TCA ATG AGG A-3'  
5'-GTC CCG GAT GTG GCC C-3'  
5'-ATC ACA GAC AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:666)  
(SEQ ID NO:667)  
(SEQ ID NO:668)  
(SEQ ID NO:669)  
(SEQ ID NO:670)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

**h/rCYP 1A2 (813C/819C)**

Primary probe  
INVADER oligonucleotide (h)  
INVADER oligonucleotide (r)  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GGA CTG TTT TCT GC-NH2-3'  
5'-CTT GTC AAA GTC CTG ATA GTG CTC CTC-3'  
5'-CTT GTT GAA GTC TTG ATA GTG TTC CTC-3'  
5'-GCA GAA AAC AGT CCG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:671)  
(SEQ ID NO:672)  
(SEQ ID NO:673)  
(SEQ ID NO:674)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

**rCYP 2B1, 1017T**

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC ACT GCG GTC AT-NH2-3'  
5'-GTG GAT AAC TGC ATC AGT GTA TGG CAT TTT C-3'  
5'-CAA GGG TTG GTA GCC TGT GTG AGC C-3'  
5'-ATG ACC GCA GTG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:675)  
(SEQ ID NO:676)  
(SEQ ID NO:677)  
(SEQ ID NO:678)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

**rCYP 2B2, 162T**

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3'  
5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3'  
5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3'  
5'-GTG ATT GGC TCT GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:679)  
(SEQ ID NO:680)  
(SEQ ID NO:681)  
(SEQ ID NO:682)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 2E1, 969G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC AAT TTC TG-NH2-3'  
5'-CCC TGT CAA TTT CTT CAT GAA GTT TA-3'  
5'-GGT ATT TCA TGA GGA TCA GGA GC-3'  
5'-CAG AAA TTG AAG AGG AGG CG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:683)  
(SEQ ID NO:684)  
(SEQ ID NO:685)  
(SEQ ID NO:686)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 3A1, 164G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC CGG GTC CCA-NH2-3'  
5'-TCC CCT GTT TCT TGA AAA GTC CAT GTG TGA-3'  
5'-AAT CCG TAG AGG AGC ACC AGG-3'  
5'-TGG GAC CCG GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:687)  
(SEQ ID NO:688)  
(SEQ ID NO:689)  
(SEQ ID NO:690)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 3A2, 1091G

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-CCG TCA CGC CTC CTC GGC AGG-NH2-3'  
5'-CAC AAT ATC GTA GGT AGG AGG TGC CTT AA-3'  
5'-GCC CCA TCG ATC TCC TCC-3'  
5'-CCT GCC GAG GAG GCG-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG AGG CGT GAC GGT-3'

(SEQ ID NO:691)  
(SEQ ID NO:692)  
(SEQ ID NO:693)  
(SEQ ID NO:694)  
(SEQ ID NO:189)  
(SEQ ID NO:190)

## rCYP 4A1, 296A

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC TAG GCT TTG CT-NH2-3'  
5'-TTC ATG TAG TCA GGG TCA TAG ACA ATT AAG A-3'  
5'-TCC CCA GAA CCA TCG AGG AAA GG-3'  
5'-AGC AAA GCC TAG TGC GC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:695)  
(SEQ ID NO:696)  
(SEQ ID NO:697)  
(SEQ ID NO:698)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

## rCYP 4A2

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC AGA AGG CCC CTT-NH2-3'  
5'-CCT TGA ACA GCA CCA GAA ATA GAC TGA GCA C-3'  
5'-GGA AGA ACC CAG AGA CAC CAT CC-3'  
5'-AAG GGG CCT TCT GTG CGC-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:699)  
(SEQ ID NO:700)  
(SEQ ID NO:701)  
(SEQ ID NO:702)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

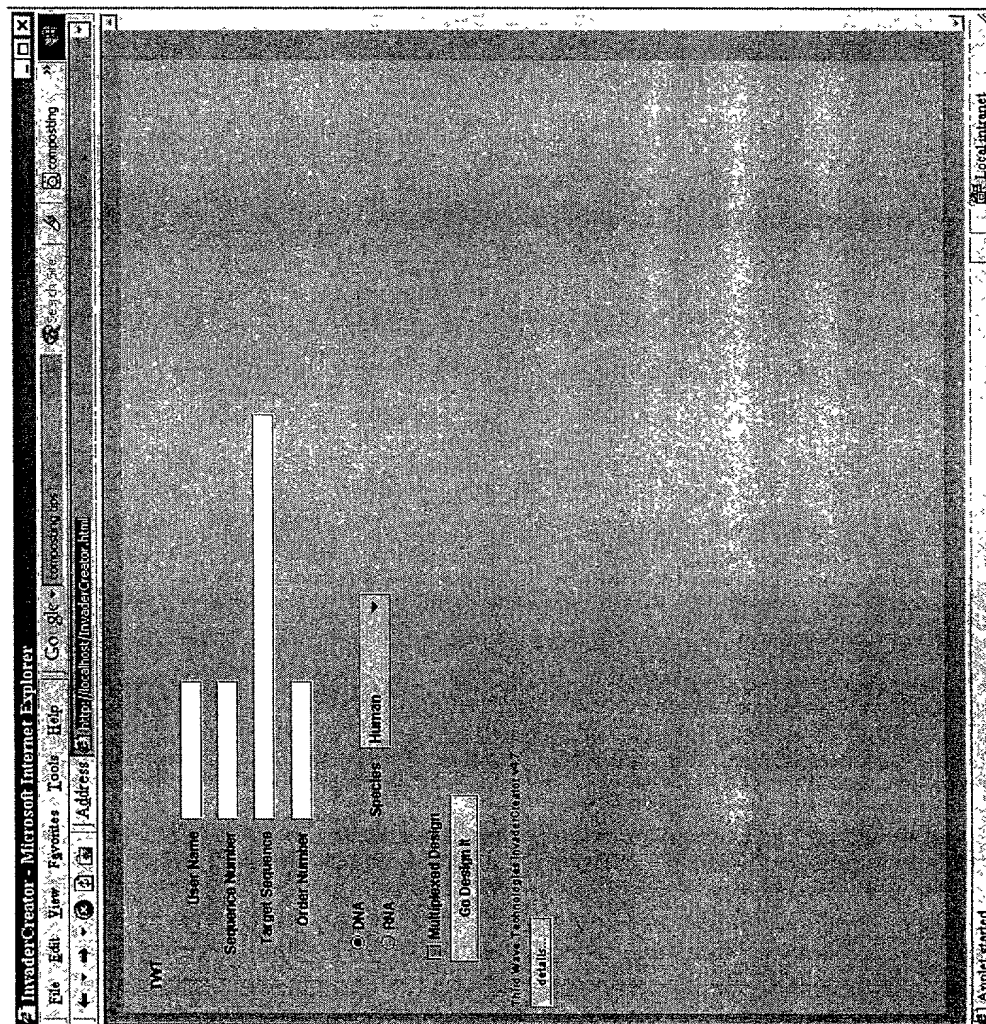
## rCYP 4A3, 1235C

Primary probe  
INVADER oligonucleotide  
Stacker  
ARRESTOR oligonucleotide  
FRET Probe  
Secondary target

5'-AAC GAG GCG CAC GTT GTG ATA CCT T-NH2-3'  
5'-GAT GAA GGC CAT AAA TTA AAA TTG TGC-3'  
5'-TGG GTA TGG AAC GTC C-3'  
5'-AAG GTA TCA CAA CGT GCG C-3'  
5'-FL-CAC (Z28) TGC TTC GTG G-3'  
5'-CCA GGA AGC AAG TGG TGC GCC TCG TTT-3'

(SEQ ID NO:703)  
(SEQ ID NO:704)  
(SEQ ID NO:705)  
(SEQ ID NO:706)  
(SEQ ID NO:189)  
(SEQ ID NO:625)

Figure 42





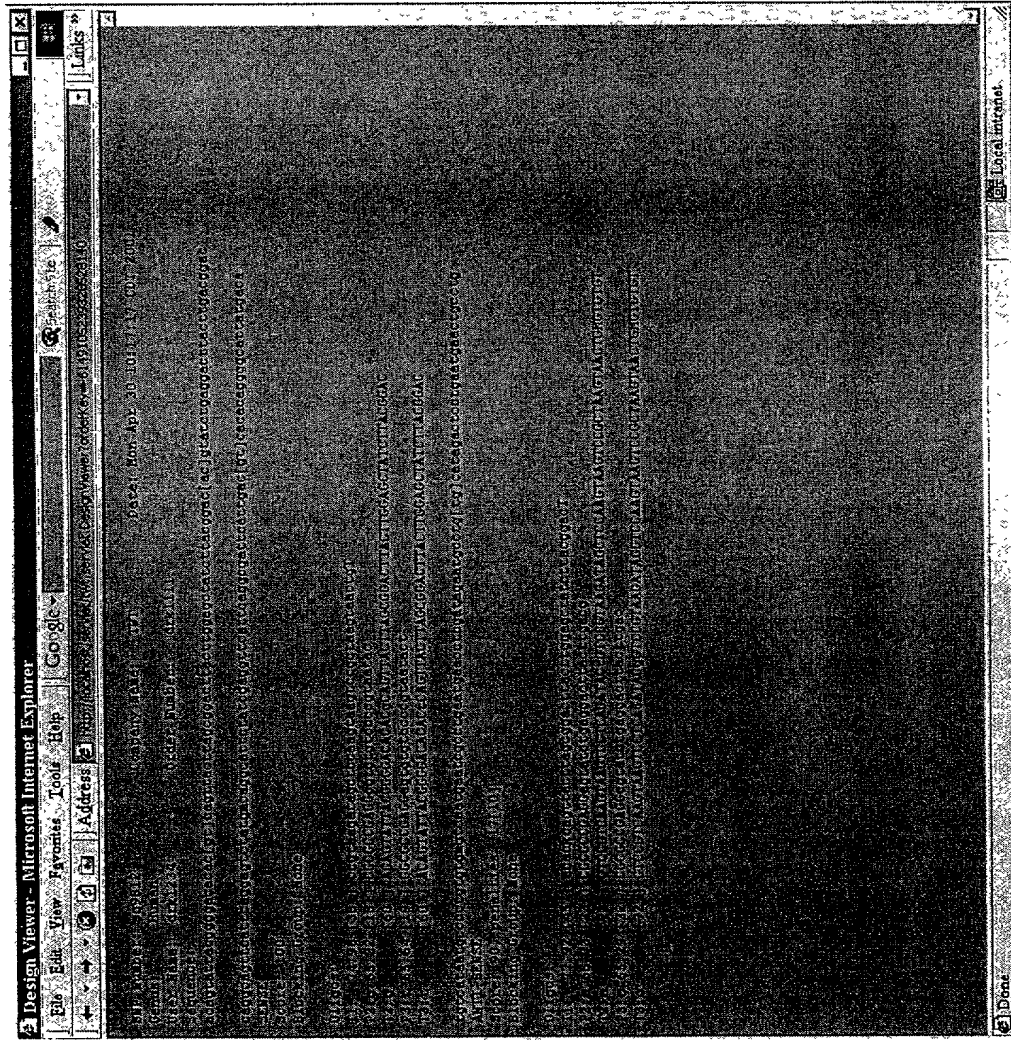






al092220" 6224200T

Figure 46



# FIGURE 47

Oligo sequence descriptions: 5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications defined in ( )

Oligo Type	Oligo Sequence (5' to 3')	Modification	SEQ ID NO
hTNF- $\alpha$			
probe	cgc ccg aga tca ctc tga ctg cct NH2	3' Amine	709
invader	ttg tca ctc ggg gtt cga gaa gat gaa		710
stacker	<u>ggg cca gag ggc tga tta g</u>	all 2'Ome bases	711
stacker	<u>ggg cca gag ggc tga tta</u>	all 2'Ome bases	712
stacker	<u>ggg cca gag ggc tg at</u>	all 2'Ome bases	713
stacker	<u>ggg cca gag ggc t</u>	all 2'Ome bases	714
stacker	<u>ggg cca gag gg</u>	all 2'Ome bases	715
arrestor	<u>agg cag tca gag tga tc</u>	all 2'Ome bases	716
arrestor	<u>agg cag tca gag tga tct c</u>	all 2'Ome bases	717
SRT	cggaaagacagcttggtgatctcgccgNH2		718
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	719
probe	cgc tca cgc ctc tct gac tgc ct NH2		720
invader	ttg tca ctc ggg gtt cga gaa gat gaa		721
stacker	<u>ggg cca gag ggc tga tta g</u>	all 2'Ome bases	722
arrestor	<u>agg cag tca gag agg cg</u>	all 2'Ome bases	723
SRT	cggaaagacagcttggtgatctcgccgNH2	3'base 2'Ome, 3'Amine	724
FRET probe	Fcaac(Cy3)gcttctccg		725
probe	cgc tca cgc ctc tct gac tgc ctg gNH2		726
invader	ttg tca ctc ggg gtt cga gaa gat gaa		727
arrestor	<u>cca ggc agt cag aga ggc g</u>	all 2'Ome bases	728
SRT	cggaaagacagcttggtgatctcgccgNH2		729
FRET probe	Fcaac(Cy3)gcttctccg	3'base 2'Ome, 3'Amine	730
probe	cgc ccg aga tca ctc tga ctg cc NH2		731
invader	ttg tca ctc ggg gtt cga gaa gat gaa		732
stacker	<u>tgg gcc aga ggg ctg att a</u>	all 2'Ome bases	733
arrestor	<u>agg cag tca gag tga tc</u>	all 2'Ome bases	734
SRT	cggaaagacagcttggtgatctcgccgNH2		735
FRET probe	Fcaac(Cy3)gcttctccg	3' Amine	736
probe	cgc ccg aga tca ctg atc tga ctg NH2		737
invader	ctt gtc act cgg ggt tgc aga aga c	3' Amine	738

stacker ccg ggg cca gag ggc tga tt 739  
 arrestor cag tca gat cag tga tc 740  
 SRT cggagaagcagttggtgatctcgccgNH2 741  
 FRET probe Fcaac(Cy3)gcttcctccg 742

probe ccg toa cgc ctc tct gac tgc ca NH2 743  
 probe ccg toa cgc ctc tct gac tgc cg NH2 744  
 probe ccg toa cgc ctc tct gac ggc ct NH2 745  
 probe ccg toa cgc ctc tct gac agc ct NH2 746  
 invader ttg toa ctc ggg gtt cga gaa gat gaa 747  
 stacker ggg cca gag gg 748  
 arrestor agg cag tca gag agg cg 749  
 arrestor agg ccg tca gag agg cg 750  
 arrestor agg ctg tca gag agg cg 751  
 SRT ccaggaagcagttggtgatctcgccgNH2 752  
 FRET probe Fcaac(Z21)tgctctcgg 753

probe ccg aga tca ctc tga tgc ctg gg NH2 754  
 invader ctt gtc act cgg ggt tgc aga aga tga a 755  
 arrestor ccc agg cag tca gag tga tcNH2 756  
 SRT cggagaagcagttggtgatctcgccgNH2 757  
 FRET probe Fcaac(Cy3)gcttcctccg 758

probe ccg aga tca ctc tga tgc ctg gg NH2 754  
 invader ctt gtc act cgg ggt tgc aga aga tga a 755  
 arrestor ccc agg cag tca gag tga tcNH2 756  
 SRT cggagaagcagttggtgatctcgccgNH2 757  
 FRET probe Fcaac(Cy3)gcttcctccg 758

3' Amine  
 all 2'Ome bases, 3' Amine  
 3' 2 last base 2' Ome, 3' Amine

hIL-1β  
 probe ccg tca cgc ctc cat ctg ttg agg g NH2 759  
 invader cag gtc ctg gaa gga gca ctt a 760  
 stacker cca tca gct tct ttg ttc ttg tca tc 761  
 arrestor gcc cta aac aga tgg agg cg 762  
 SRT cggagaagcagttggtgatctcgccgNH2 763  
 FRET probe Fcaac(Cy3)gcttcctccg 764

probe ccg toa cgc ctc cat ctg ttg agg gc NH2 765  
 invader cag gtc ctg gaa gga gca ctt a 766  
 stacker cat cag ctt ctt tgt tct tgt cat cc 767  
 arrestor gcc cta aac aga tgg agg cg 768  
 SRT cggagaagcagttggtgatctcgccgNH2 769  
 FRET probe Fcaac(Cy3)gcttcctccg 770

probe ccg toa cgc ctc cat ctg ttg agg NH2 771

3' Amine  
 all 2'Ome bases  
 all 2'Ome bases  
 3'base 2'Ome, 3'Amine





FRET probe	Fcaac(Cy3)gcttctccg	836
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tc NH2	837
probe	gcc gtc acg cct ctt tgg gtt tgc ttg tNH2	838
invader	tggagtgaagtgaagtcacgcttcggaga	839
arrestor	<b>gacaagcaaaccccaagagggc</b>	840
SRT	cggaagaagcagttgagggcgtagcgcgNH2	841
FRET probe	Fcaac(Cy3)gcttctccg	842
probe	cct gtc tgc ctg cct tgc gag tt ggg	843
probe	cct gtc tgc ctg cct tgc gag tt gg	844
invader	ggg ttg tgg agt gag tgt tca agt a	845
arrestor	<b>ccc aaa ctc cga agg cag cg</b>	846
SRT	cgaggaagcagttggcagcgagacgNH2	847
SRT	cgaggaagcagttggcagcgagac(Amino dA)gNH2	848
SRT	cgaggaagcagttggcagcg(Amino dA)gacagNH2	849
SRT	cgaggaagcagttggc(Amino dA)gagacagNH2	850
SRT	cgaggaagcagttggcagcg(Amino dA)gac(Amino dA)gNH2	851
SRT	cgaggaagcagttggc(Amino dA)gagagac(Amino dA)gNH2	852
SRT	cgaggaagcagttggc(Amino dA)gag(Amino dA)gacagNH2	853
FRET probe	Fcaac(Cy3)gcttctccg	854
probe	gcc gtc acg cct ctg gga cac ttg ctg cNH2	855
invader	gcc aca atg gtc ttg aag atc aca gct tct ta	856
arrestor	<b>gca gca agt gtc cca gag gcg NH2</b>	857
SRT	cggaagaagcagttgagggcgtagcgcgNH2	858
FRET probe	Fcaac(Cy3)gcttctccg	859
probe	cgc tca cgc ctc ctt cgg agt ttg gg NH2	860
invader	ggg ttg tgg agt gag tgt tca agt a	861
arrestor	<b>5'-ggg-aaa-ctc-cga-agg-agg-cg-3'</b>	862
SRT	ccaggaagcagttgagggcgtagcgcg	863
FRET probe	Fcac(Z21)tgctctgg	864
probe	cgc cga gat cac ctt cgg agt ttg ggNH2	865
invader	ggg ttg tgg agt gag tgt tca agt a	866
arrestor	<b>ccc aaa ctc cga agg tga tc</b>	867
SRT	cggaagaagcagttgtagtctcggcgNH2	868
FRET probe	Fcaac(Cy3)gcttctccg	869





# hUbiquitin

probe cgc cga gat cac ctt tac att ttc tat cgt  
 probe cgc cga gat cac ctt tac att ttc tat cgt NH2  
 invader 5' -cct tcc tta tcc tgg atc ttg gca -3'  
 arrestor acg ata gaa aat gta aag gtg atc  
 SRT 5'-cgc agt gag aat gag gtg atc tgg gcggt-3'  
 FRET probe 5'-Red-ctc-Z21-ttc tca gtg cg-3'

905  
906  
907  
908  
909  
910

3' Amine

all 2'Ome bases  
3' last 3 bases 2'Ome

# hIL-2

probe gttcttttgtctcgcactgccNH2  
 invader cca gca gta aat gct cca gtt gta ga  
 stacker tag aac ttg aag tag gtg c  
 arrestor caa aga aaa cac agg agg c  
 SRT ccaggaagcaagtgaggcgtgacggu  
 FRET probe Fcac(Z21)tgctctgtg

911  
912  
913  
914  
915  
916

3' Amine

all 2'Ome bases  
all 2'Ome bases  
3' 3bases 2'Ome

probe aac gag gcg cac ctg tgt ttt ctt tg NH2  
 invader cca gca gta aat gct cca gtt gta ga  
 stacker tag aac ttg aag tag gtg c  
 arrestor caa aga aaa cac agg tgc g  
 SRT ccaggaagcaagtggtgcgcctcgttt  
 FRET probe Fcac(Z21)tgctctgtg

917  
918  
919  
920  
921  
922

3' Amine

all 2'Ome bases  
all 2'Ome bases  
3' last 3 bases 2'Ome

probe ccg tca cgc ctc cag ttg tag NH2  
 invader aaa atc atc tgt aaa tcc agc agt aaa tga  
 stacker ctg tgt ttt ctt tgt aga ac  
 arrestor cta caa ctg gag gag gc  
 SRT ccaggaagcaagtgaggcgtgacggu  
 FRET probe Fcac(Z21)tgctctgtg

923  
924  
925  
926  
927  
928

3' Amine

5' 6 bases 2'Ome  
all 2'Ome bases  
all 2'Ome bases  
3' 3bases 2'Ome

probe aac gag gcg cac ctc cag ttg tag NH2  
 invader aaa atc atc tgt aaa tcc agc agt aaa tga  
 stacker ctg tgt ttt ctt tgt aga ac  
 arrestor cta caa ctg gag gtg cg  
 SRT ccaggaagcaagtggtgcgcctcgttt  
 FRET probe Fcac(Z21)tgctctgtg

929  
930  
931  
932  
933  
934

3' Amine

5' 6 bases 2'Ome  
all 2'Ome bases  
all 2'Ome bases  
3' last 3 bases 2'Ome

78

probe	cgc tca cgc ctc ctg tgt ttt ctt tgt aNH2	3' Amine	935
invader	gta aat cca gca gta aat gct cca gtt gta ga		936
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	937
arrestor	<u>tacaaagaaaacacagaggcggtNH2</u>	<u>all 2'Ome bases, 3' amine</u>	938
SRT	ccaggaagcaagtgaggcgtagacggu	<u>3' 3bases 2'Ome</u>	939
FRET probe	Fcac(Z21)tgctctgtg		940
probe	aac gag gcg cac ctg tgt ttt ctt tgt aNH2	3' Amine	941
invader	gta aat cca gca gta aat gct cca gtt gta ga		942
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>all 2'Ome bases</u>	943
arrestor	<u>tac aaa gaa aac aca ggt gcg</u>	<u>all 2'Ome bases</u>	944
SRT	ccaggaagcaagtggtgagcgctcgttt	<u>3' last 3 bases 2'Ome</u>	945
FRET probe	Fcac(Z21)tgctctgtg		946
probe	cgc toa cgc ctc ctc cag ttg taa NH2	3' Amine	947
probe	cgc toa cgc ctc ctc cag ttg tat NH2	3' Amine	948
probe	cgc toa cgc ctc ctc cag ttg tac NH2	3' Amine	949
invader	<u>aaa atc atc tgt aaa tcc agc agt aaa tga</u>	<u>5' 6 bases 2'Ome</u>	950
stacker	<u>ctg tgt ttt ctt tgt aga ac</u>	<u>all 2'Ome bases</u>	951
arrestor	<u>cta caa ctg gag gag gc</u>	<u>all 2'Ome bases</u>	952
SRT	ccaggaagcaagtgaggcgtagacggu	<u>3' 3bases 2'Ome</u>	953
FRET probe	Fcac(Z21)tgctctgtg		954
probe	gcc gtc acg cct ttc ttc ttg atg NH2	3' Amine	955
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga		956
arrestor	<u>cat gcc caa gaa ggg agg cg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	957
SRT	cggaagaagcagttggaggcgtagcggcNH2	<u>3'2 bases 2'Ome, 3'Amine</u>	958
FRET probe	Fcaac(Cy3)gctctctccg		959
probe	cgc tca cgc ctc taa ttc cat tca aaa tca tct NH2	3' Amine	960
invader	cat cct ggt gag ttt ggg att ctt gta att tat a		961
stacker	<u>gta aat cca gca gta aat gct cca gNH2</u>	<u>all 2'Ome bases, 3' Amine</u>	962
arrestor	<u>aga tga ttt tga atg gaa tta gag gcg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>	963
SRT	cggaagaagcagttggaggcgtagcggcNH2	<u>3'2 bases 2'Ome, 3'Amine</u>	964
FRET probe	Fcaac(Cy3)gctctctccg		965
probe	ccg ccg aga tca cct gtg ttt tct ttg ta		966
invader	gta aat cca gca gta aat gct cca gtt gta ga		967
stacker	<u>gaa ctt gaa gta ggt gca ctg tt</u>	<u>All 2' Ome</u>	968
stacker	gaa ctt gaa gta ggt gca ctg tt		969

stacker	<b>gaa</b> ctt gaa gta ggt gca ctg tt	970
stacker	<b>gaa</b> <u>ctt</u> gaa gta ggt gca ctg tt	971
arrestor	<b>tac</b> <u>aaa</u> <u>gaa</u> <u>aac</u> <u>aca</u> <u>ggt</u> <u>gat</u> <u>ct</u>	972
SRT	cggaggaagcagttggtgatcgcgcgNH2	973
FRET probe	Fcaac(Cy3)gcttctctccg	974
probe	aac gag gcg cac cct tct tgg gca tgnH2	975
invader	ttc tag aca ctg aag atg ttt cag ttc tgt gga	976
arrestor	<b>cat</b> <u>gcc</u> <u>caa</u> <u>gaa</u> <u>ggg</u> <u>tgc</u> <u>gNH2</u>	977
SRT	cggagaagcagttggtgcgcctcgtttaaNH2	978
FRET probe	Fcaac(Cy3)gcttctctccg	979
probe	aac gag gcg cac taa ttc cat tca aaa tca tct	980
invader	cat cct ggt gag ttt ggg att ctt gta att tat a	981
stacker	<b>gta</b> <u>aat</u> <u>cca</u> <u>gca</u> <u>gta</u> <u>aat</u> <u>gct</u> <u>cca</u> <u>gNH2</u>	982
arrestor	<b>aga</b> <u>tga</u> <u>ttt</u> <u>tga</u> <u>atg</u> <u>gaa</u> <u>tta</u> <u>gtg</u> <u>gt</u> <u>gNH2</u>	983
SRT	cggagaagcagttggtgcgcctcgtttaaNH2	984
FRET probe	Fcaac(Cy3)gcttctctccg	985

hIL-4	cct gtc tgc ctg cca gtt gtg ttc ttg gag gNH2	986
probe	ccc tgc aga aga ttt cct tct a	987
invader	ccc tgc aga tgg ttt cct tct a	988
arrestor	<b>ctc</b> <u>caa</u> <u>gaa</u> <u>cac</u> <u>aac</u> <u>tgg</u> <u>cag</u> <u>cNH2</u>	989
arrestor	<b>ctc</b> <u>caa</u> <u>gaa</u> <u>cac</u> <u>aac</u> <u>tgg</u> <u>cag</u> <u>cga</u> <u>gNH2</u>	990
arrestor	<b>ctc</b> <u>caa</u> <u>gaa</u> <u>cac</u> <u>aac</u> <u>tgg</u> <u>cag</u> <u>cga</u> <u>gaNH2</u>	991
SRT	cggagaagcagttggtgcgcgcagagacaggNH2	992
FRET probe	Fcaac(Cy3)gcttctctccg	993
probe	aac gag gcg cac ctt gga ggc agc aaa NH2	994
probe	aac gag gcg cac ctt gga ggc agc aaNH2	995
invader	aag gtt tcc ttc tca gtt gtg tta	996
arrestor	<b>ctt</b> <u>tgc</u> <u>tgc</u> <u>ctc</u> <u>caa</u> <u>ggt</u> <u>gcg</u> <u>NH2</u>	997
SRT	cggagaagcagttggtgcgcctcgtttaa NH2	998
FRET probe	Fcaac(Cy3)gcttctctccg	999
probe	cag tca cgt ctg tgg agg cag caa aga tg NH2	1000
invader	aag gtt tcc ttc tca gtt gtg ttc ta	1001
arrestor	<b>cat</b> <u>ctt</u> <u>tgc</u> <u>tgc</u> <u>ctc</u> <u>cag</u> <u>aga</u> <u>cg</u> <u>NH2</u>	1002

SRT	gctactgagatgaaggagacgtgactgtanNH2	1003
FRET probe	Fcttc(Cy3)lctcagtagc	1004
probe	aac gag gcg cac ctt gga ggc agc aaa g NH2	1005
invader	aag gtt tcc ttc tca gtt gtc tta	1006
arrestor	<b>ctt tgc tgc ctc caa ggt ggc NH2</b>	1007
SRT	cggaggagacagtggtgctgcctcgttaa	1008
FRET probe	Fcaac(Cy3)gcttctccg	1009
<hr/>		
mIL-2		
probe	cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1010
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1011
arrestor	<b>act gtt gta aaa cta aag ggg gtc atc t NH2</b>	1012
SRT	cggaggagacagtggtgctgcctcgttaa	1013
FRET probe	Fcaac(Cy3)gcttctccg	1014
probe	tgc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1015
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1016
arrestor	<b>act gtt gta aaa cta aag ggg gtc gtc NH2</b>	1017
arrestor	<b>act gtt gta aaa cta aag ggg gtc at NH2</b>	1018
arrestor	<b>act gtt gta aaa cta aag ggg gtc at ctNH2</b>	1019
arrestor	<b>act gtt gta aaa cta aag ggg gtc at ctgNH2</b>	1020
SRT	cggaggagacagtggtgctgcctcgttaa	1021
FRET probe	Fcaac(Cy3)gcttctccg	1022
probe	gc cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1023
probe	c cgc cga gat cac ccc ttt agt ttt aca aca gtNH2	1024
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1025
arrestor	<b>act gtt gta aaa cta aag ggg gtc at NH2</b>	1026
SRT	cggaggagacagtggtgctgcctcgttaa	1027
FRET probe	Fcaac(Cy3)gcttctccg	1028
probe	aac gag gcg cac ccc ttt agt ttt aca aca gt NH2	1029
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1030
arrestor	<b>act gtt gta aaa cta aag ggg gtc gtc</b>	1031
SRT	cggaggagacagtggtgctgcctcgttaa	1032
FRET probe	Fcaac(Cy3)gcttctccg	1033
probe	aac gag gcg cac ccc ttt agt ttt aca aca gt NH2	1034

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invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1035
arrestor	<u>agt aac tgt tgt aaa act aaa ggg gtg cg NH2</u>	1036
SRT	cggaggagcagttggtgcctcgttaa	1037
FRET probe	Fcaac(Cy3)gcttctccg	1038
probe	cgcacgcctccctttagttttacaacNH2	1039
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1040
stacker	<u>agt tac tct gat att gct gat gaa att ctc ag</u>	1041
arrestor	<u>gtgtaaaactaaaggggagcg</u>	1042
SRT	cggaagaagcagttggaggcgtgacggtNH2	1043
FRET probe	Fcaac(Cy3)gcttctccg	1044
probe	cgcgagatcaacccctttagttttacaacNH2	1045
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1046
stacker	<u>agt tac tct gat att gct gat gaa att ctc ag</u>	1047
arrestor	<u>gtgtaaaactaaagggggtatc</u>	1048
SRT	cggaagaagcagttggtgatcgcggcgNH2	1049
FRET probe	Fcaac(Cy3)gcttctccg	1050
probe	cgcgcacgcctccctttagttttacaacNH2	1051
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1052
stacker	<u>cagttactctgatatgctgatgaaattctca</u>	1053
arrestor	<u>gtgtaaaactaaaggggagcg</u>	1054
SRT	cggaagaagcagttggaggcgtgacggtNH2	1055
FRET probe	Fcaac(Cy3)gcttctccg	1056
probe	cgcgcacgcctccctttagttttacaacNH2	1057
invader	gaa ttg gca ctc aaa tgt gtt gtc aga ga	1058
stacker	<u>cagttactctgatatgctgatgaaattctca</u>	1059
arrestor	<u>gtgtaaaactaaaggggagcg</u>	1060
SRT	ccaggagcagttggaggcgtgacggtNH2	1061
FRET probe	Fcaac(Cy3)gcttctggt	1062
<hr/>		
mIL-10		
probe	cgc tca cgc ctc ccg tta gct aag at NH2	1063
invader	cga ggt tt cca agg agt tgt tta	1064
stacker	<u>ccc tgg atc aga ttt aga gag c</u>	1065
arrestor	<u>atc tta gct aac ggg agg cg</u>	1066
SRT	cggaagaagcagttggaggcgtgacggtNH2	1067

FRET probe	Fcaac(Cy3)gcttctccg	1068
probe	ccg tca cgc ctc agt tgt ttc cgt tNH2	1069
invader	aga ggt aca aac gag gtt ttc caa ggc	1070
stacker	<b>agc taa gat ccc tgg atc aga ttt aga ga</b>	1071
arrestor	<b>aac gga aac aac tga ggc g</b>	1072
SRT	ccaggagcaagtggaggcgtagcggg	1073
FRET probe	Fcac(Z21)tgcttcgtgg	1074
probe	ccg tca cgc ctc ccg tta gct aNH2	1075
invader	caa acg agg ttt tcc aag gag ttg a	1076
stacker	<b>aga tcc ctg gat cag att tag aga gct c</b>	1077
arrestor	<b>tag cta acg gaa aga ggc g</b>	1078
SRT	ccaggagcaagtggaggcgtagcggg	1079
FRET probe	Fcac(Z21)tgcttcgtgg	1080
probe	ccg tca cgc ctc ccg tta gNH2	1081
invader	aga ggt aca aac gag gtt ttc caa gga ga	1082
stacker	<b>cta aga tcc ctg gat cag att tag aga g</b>	1083
arrestor	<b>ctaacggaaacaagggcg</b>	1084
SRT	ccaggagcaagtggaggcgtagcggg	1085
FRET probe	Fcac(Z21)tgcttcgtgg	1086
<hr/>		
hIFN- $\gamma$		
probe	aac gag gcg cac ctt acc aat gcc taa gaa aag agt tNH2	1087
invader	tgc att att ttt ctg tca ctc tcc tct ttc caa tta	1088
arrestor	<b>aac tct ttt ctt agg cat ttt gaa ggt gcg NH2</b>	1089
SRT	cggaggagcagttggtgcgcctcgttaaNH2	1090
FRET probe	Fcaac(Cy3)gcttctccg	1091
probe	cag tca cgt ctc tct tca aaa tgc cta aga aaa gag tNH2	1092
invader	tct gca tta ttt ttc tgt cac tct cct ctt tcc aat a	1093
arrestor	<b>act ctt ttc tta ggc att ttg aag aga gac gNH2</b>	1094
SRT	<b>gctactgagatgaaggagacgtgactgttaNH2</b>	1095
FRET probe	Fcttc(Cy3)tctcagtagc	1096
<hr/>		
mIFN- $\gamma$		
probe	aac gag gcg cac cct ttt gcc agt tcc NH2	1097

invader	gct ctg cag gat ttt cat gtc acc ata			1098
arrestor	<u>gag gaa ctg gca aaa ggg tgc gNH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1099
SRT	<u>gctactgagatgaaggagacgtgactgtanNH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1100
FRET probe	Fcttc(Cy3)ctcagtagc			1101
probe	aac gag gcg cac cct ttt gcc agt NH2	3' Amine		1102
invader	gct ctg cag gat ttt cat gtc acc ata			1103
stacker	<u>tcc tcc aga tat cca aga aga gac tc</u>	<u>all 2'Ome bases</u>		1104
arrestor	<u>act ggc aaa agg cgg gc</u>	<u>all 2'Ome bases</u>		1105
SRT	cgg agg aaag cag ttg gtg cgc ctc <u>guu aa NH2</u>	3' last 5 bases <u>2'Ome</u>		1106
SRT	cgg aag aaag cag ttg gtg cgc ctc <u>guu aa NH2</u>	3' last 5 bases <u>2'Ome</u>		1107
FRET probe	Fcaac(Cy3)gcttctccg			1108
probe	gcc gca cgc cgc ctt ttg cca gt NH2	3' Amine		1109
invader	gct ctg cag gat ttt cat gtc acc ata			1110
stacker	<u>tcc tcc aga tat cca aga aga gac tc</u>	<u>all 2'Ome bases</u>		1111
arrestor	<u>act ggc aaa agg cgg gc</u>	<u>all 2'Ome bases</u>		1112
SRT	cgg agg aag cag ttg cgg cgt gcg gca NH2			1113
FRET probe	Fcaac(Cy3)gcttctccg			1114
probe	aac gag gcg cac cct ttt gcc agt tc NH2	3' Amine		1115
invader	gct ctg cag gat ttt cat gtc acc ata			1116
stacker	<u>ctc cag ata tcc aag aag aga ctc</u>	<u>all 2'Ome bases</u>		1117
arrestor	<u>gaa ctg gca aaa ggg tgc g</u>	<u>all 2'Ome bases</u>		1118
SRT	cggaggagcagttggtgcgcctcgttaaNH2	3' last5 bases 2'Ome		1119
FRET probe	Fcaac(Cy3)gcttctccg			1120
<hr/>				
hIL-8				
probe	ccg tca cgc ctc ctt ggc aaa act gca ccNH2	3' Amine		1121
probe	ccg tca cgc ctc ctt ggc aaa act gca cca NH2	3' Amine		1122
invader	ctt tat gca ctg aca tct aag ttc ttt agc act ca			1123
arrestor	<u>tgg tgc agt ttt gcc aag gag gcg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1124
arrestor	<u>tgg tgc agt ttt gcc aag gag gcg tg NH2</u>	<u>all 2'Ome bases, 3' Amine</u>		1125
SRT	cggaaagacagcttgaggcggtgacggcNH2	3'2 bases <u>2'Ome</u> , 3'Amine		1126
FRET probe	Fcaac(Cy3)gcttctccg			1127
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg gNH2	3' Amine		1128
probe	ccg tca cgc ctc cat ctt cac tga ttc ttg gaNH2	3' Amine		1129
invader	agt gtt gaa gta gat ttg ctt gaa gtt tca ctg ga			1130



stacker	<b>gat acc aca gag aat gaa tttt</b>	all 2'Ome bases	1131
arrestor	<b>tcc aag aat cag tga aga tgg agg cg NH2</b>	all 2'Ome bases, 3' Amine	1132
arrestor	<b>tcc aag aat cag tga aga tgg agg cgt gNH2</b>	all 2'Ome bases, 3' Amine	1133
arrestor	<b>g aat cag tga aga tgg agg cg</b>	all 2'Ome bases	1134
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1135
FRET probe	Fcaac(Cy3)gcttctccg		1136
probe	cgc tca cgc cct tgg ctc aat ttt gct NH2	3' Amine	1137
invader	cca ttc aat tcc tga aat taa agt tgc gat att ctc ttg gca		1138
invader	<b>cc tga aat taa</b> agt tgc gat att ctc ttg gca	5' 10 bases are 2'Ome	1139
invader	cc tga aat taa agt tgc gat att ctc ttg gca		1140
arrestor	<b>agc aaa att gag cca agg gag gcg NH2</b>	all 2'Ome bases, 3' Amine	1141
arrestor	<b>agc aaa att gag cca agg gag gcg tgnNH2</b>	all 2'Ome bases, 3' Amine	1142
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1143
FRET probe	Fcaac(Cy3)gcttctccg		1144
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1145
invader	ttc tag caa acc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1146
invader	<b>cc cat tca att</b> cct gaa att aaa gtt cgg ata ttc ta	5' 10 bases 2'Ome	1147
invader	cc cat tca att cct gaa att aaa gtt cgg ata ttc ta		1148
arrestor	<b>cca agg gcc aag gag gcg tNH2</b>		1149
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'2 bases 2'Ome, 3' Amine	1150
FRET probe	Fcaac(Cy3)gcttctccg		1151
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1152
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1153
stacker	<b>ttg gat acc aca gag aat gaa tt</b>	all 2'Ome bases	1154
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1155
FRET probe	Fcaac(Cy3)gcttctccg		1156
probe	cgc tca cgc ctc cat ctt cac tga tt NH2	3' Amine	1157
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1158
stacker	<b>ctt gga tac cac aga gaa tga att</b>		1159
SRT	cggaagaagcagttggaggcgtgacggcNH2	3'base 2'Ome, 3' Amine	1160
FRET probe	Fcaac(Cy3)gcttctccg		1161
probe	cgc tca cgc ctc cat ctt cac tga ttc ttg NH2	3' Amine	1162
invader	agt gtt gaa gla gat ttg ctt gaa gtt tca ctg ga		1163
helper	<b>ata-cca-cag-aga-atg-aat-att-att-atg</b>	all 2'Ome bases	1164
arrestor	<b>tcc aag aat cag tga aga tgg agg cgt gNH2</b>	all 2'Ome bases, 3' Amine	1165

SRT	cggaagaagcagttggagcggtgacgg <del>t</del> NH2	3'base <u>2'Ome</u> , 3'Amine	1166
FRET probe	Fcaac(Cy3)gcttctccg		1167
SRT	cggaagaagcagttggtgatctcgcg <del>g</del> NH2	3' Amine	1168
FRET probe	Fcaac(Cy3)gcttctccg		1169
SRT	cggaagaagcagttggagcggtgacgg <del>t</del> NH2	3'base <u>2'Ome</u> , 3'Amine	1170
FRET probe	Fcaac(Cy3)gcttctccg		1171
SRT	ccaggaagcaagtggagcggtgac <del>ggu</del>	3' 3bases <u>2'Ome</u>	1172
FRET probe	Fcaac(Z21)tgctctg		1173
SRT	cggaggaagcagttggtgatctcgcg <del>g</del> NH2	3' 2 last base <u>2' Ome</u> , 3' Amine	1174
FRET probe	Fcaac(Cy3)gcttctccg		1175
SRT	cggagaagcagttggagcggtgacg <del>gc</del> NH2	3'2 bases <u>2'Ome</u> , 3'Amine	1176
FRET probe	Fcaac(Cy3)gcttctccg		1177
SRT	ccaggaagcaagtggcgccctc <del>gtt</del>	3' last 3 bases <u>2'Ome</u>	1178
FRET probe	Fcaac(Z21)tgctctg		1179
SRT	cggaggaagcagttggtgcgcctc <del>gttaa</del> NH2	3' last5 bases 2'Ome	1180
FRET probe	Fcaac(Cy3)gcttctccg		1181
SRT	cggaggaagcggttggtgatctcgcg <del>gca</del> NH2	3' Last 2bases 2'Ome, 3' Amine	1182
FRET probe	Fcaac(Cy3)gcttctccg		1183
SRT	gctactgagatgaaggagacgtgactga <del>t</del> NH2	3' Amine	1184
FRET probe	Fcttc(Cy3)tctcagtagc		1185
SRT	ccaggaagcagttggagcggtgacgg <del>t</del> NH2	3' 2 bases <u>2'Ome</u> , 3'Amine	1186
FRET probe	Fcaac(Cy3)gcttctg		1187
h3A4 probe	agg agc cac tcc att gga tga agc		1188
h3A4 invader	atg tac aga atc ccc ggt tat tta tgc aga		1189
Capture Sequence			

h3A4 probe	gtg gcg tat cac aga caa tga gag	1190
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1191
Capture Sequence		
Set 2/Set 3		
h3A4 probe	AAC GAG GCG CAC CAC AGA CAA TGA GAG	1192
h3A4 arrestor	<b>CCTCAATGCTGCTGCTGCG-NH2</b>	1193
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1194
h3A4 stacking oligo	agctcaatgcatgtacagaatccccgg	1195
h3A4 stacking oligo	<b>agctcaatgcatgtacagaatccccgg</b>	1196
SRT		
FRET Oligo		
Set 4		
h3A4 probe	aac gag gcg cac cac aga caa tga gag ag-NH2	1197
h3A4 arrestor	<b>ctc tct cat tgt ctg tgg tgc g-NH2</b>	1198
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1199
h3A4 stacking oligo	<b>ctc aat gca tgt aca gaa tcc ccg gtt</b>	1200
SRT		
FRET Oligo		
Set 5		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc t-NH2	1201
h3A4 arrestor	<b>agc tct ctc att gtc tgt ggt gcg-NH2</b>	1202
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1203
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1204
Set 6		
h3A4 probe	aac gag gcg cac cac aga caa tga gag agc-NH2	1205
h3A4 arrestor	<b>gct ctc tca ttg tct gtg gtg cg-NH2</b>	1206
h3A4 invader	cct cct tta tat tcc caa gta taa cac tct aa	1207
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-ccg	1208
Set 7/Set 8		
h3A4 probe	aac gag gcg cac cac aga caa tga gag a-NH2	1209
h3A4 probe	aac gag gcg cac cac aga caa tga gag a	1210
h3A4 arrestor	<b>tct ctc att gtc tgt ggt gcg c-NH2</b>	1211
h3A4 stacking oligo	<b>gct caa tgc atg tac aga atc ccc ggt t</b>	1212

h3A4 invader  
SRT  
FRET Oligo  
cct cct tta tat tcc caa gta taa cac tct aa  
1213

Set 9  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET Oligo  
aac gag ggc cac cac aga caa tga ga-NH2  
**tct cat tgt ctg tgg tgc gc-NH2**  
cct cct tta tat tcc caa gla taa cac tct aa  
gag ctc aat gca tgt aca gaa tcc ccg  
1214  
1215  
1216  
1217

Set 1/Set 2  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 arrestor  
SRT  
AACGAGGGCGCACCTCTTATCAGAGCTC  
AACGAGGGCGCACCTCTTATCAGAGCTC-NH2  
ttg tgg agg aaa tta ttg aga aat gtt gat ta  
**GAGCTCTGATAAGAGGGTGCG-NH2**  
1218  
1219  
1220  
1221

Set 1 / Set 2 / Set 3  
h3A4 probe  
h3A4 arrestor  
h3A4 invader  
h3A4 stacking oligo  
h3A4 stacking oligo  
h3A4 stacking oligo  
SRT  
FRET  
ccg tca cgc ctc gcc cca ca - NH2  
**tgt ggg gcg agg cg**  
cag cac agg ctg ttg acc atc ata aaa c  
**cuu-uuc-cau-acu-uuu-uau-gac-auu-c**  
ctt ttc cag act ttt tat gac att c  
**ctt ttc cag act ttt tat gac**  
1222  
1223  
1224  
1225  
1226  
1227

Set 4/Set 5  
h3A4 probe  
h3A4 probe  
h3A4 invader  
h3A4 stacking oligo  
SRT  
FRET  
ccg tca cgc ctc gcc cca ca  
ccg tca cgc ctc gcc cca ca - HEX  
cag cac agg ctg ttg acc atc ata aaa c  
**cuu-uuc-cau-acu-uuu-uau-gac-auu-c**  
1228  
1229  
1230  
1231

Set 6/ Set 7/ Set 8  
h3A4 probe  
ccg tca cgc ctc gcc cca cc - NH2  
1232

28

h3A4 probe	ccg tca cgc ctc gcc cca cg - NH2	1233
h3A4 probe	ccg tca cgc ctc gcc cca ct - NH2	1234
h3A4 arrestor	<b>tgt ggg gcg agg cg</b>	1235
h3A4 invader	cag cac agg ctc ttc acc atc ata aaa c	1236
h3A4 stacking oligo	<b>cuu-uuc-cau-acu-uuu-uau-gac-auu-c</b>	1237
SRT		
FRET		

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Set 1		
h3A4 probe	ccg tca cgc ctc atc ata aaa gcc c - NH2	1238
h3A4 arrestor	<b>ggg ctt tta tga tca ggc g</b>	1239
h3A4 invader	cag cac agg ctc ttc acc c	1240
h3A4 stacking oligo	<b>cac act ttt cca tac ttt tta tg</b>	1241
SRT		
FRET		

Set 2		
h3A4 probe	aac gag gcg cac cca ttc gat gaa g - NH2	1242
h3A4 arrestor	<b>ctt cat cca atg ggt ggc c</b>	1243
h3A4 invader	gta cag aat ccc cgg tta ttt atg cag ta	1244
h3A4 stacking oligo	<b>ccc atc ttc att tca gag</b>	1245
SRT		
FRET		

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Set 1		
h3A5 probe	gtg gcg tat cgt gtc taa ttt caa g	1246
h3A5 invader	aat ggg ttt ttc tgg ttc aag aag tcc ttg a	1247
Capture Sequence		

Set 2/Set 3		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAG	1248
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAGGG-Pi	1249
h3A5 arrestor	<b>CTTGAAATTAGACACGGTGGC-NH2</b>	1250
h3A5 invader	aat ggg ttt ttc tgg ttc aag aag tcc ttg a	1251
SRT		
FRET		

Set 4		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAG	1252
h3A5 arrestor	<b>CTTGAAATTAGACACGGTGGC-NH2</b>	1253

h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1254
h3A5 stacking oligo	ggg atc tgt gtt tct tta caa ggt	1255
SRT		
FRET		
Set 5		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAG	1256
h3A5 arrestor	<b>ctt gaa att aga cac ggt tct c</b>	1257
h3A5 invader	ggg ttt tct tga aga agt cct tga	1258
h3A5 stacking oligo	<b>ggg atc tct gtt tct</b>	1259
SRT		
FRET		
Set 6		
h3A5 probe	AACGAGGCGCACCGTGCTCTAATTTCAAGGG-NH2	1260
h3A5 arrestor	<b>CCCTTGAAATTAGACACGGTGCG</b> -NH2	1261
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1262
SRT		
FRET probe	FL-caa-c(cy3)g-ctt-cct-cgg	1263
Set 7/Set 8		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa gg-NH2	1264
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa gg	1265
h3A5 arrestor	<b>cct tga aat tag aca cgg tgc tgc gc</b> -NH2	1266
h3A5 arrestor	<b>cct tga aat tag aca cgg tgc tgc gc</b>	1267
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1268
h3A5 stacking oligo	gga tct gtg ttt ctt tac aag gtt tga agg ag	1269
SRT		
FRET		
Set 9		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt caa-NH2	1270
h3A5 arrestor	<b>ttg aaa tta gac acg gtt cgc</b> -NH2	1271
h3A5 invader	aat ggg ttt ttc tgg ttg aag aag tcc ttg a	1272
h3A5 stacking oligo	ggg gat ctg tgt ttc ttt aca agg	1273
SRT		
FRET		
Set 10		
h3A5 probe	aac gag gcg cac cgt gtc taa ttt ca - NH2	1274

1275  
1276  
1277

**h3A5 arrestor**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

**h3A5 arrestor**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

1278  
1279

**h3A5 probe**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

1280  
1281

**h3A5 probe**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

1282  
1283  
1284  
1285

**h3A5 probe**  
**h3A5 arrestor**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

1286  
1287  
1288  
1289

**h3A5 probe**  
**h3A5 arrestor**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

1290  
1291  
1292  
1293

**h3A5 probe**  
**h3A5 arrestor**  
**h3A5 invader**  
**h3A5 stacking oligo**  
**SRT**  
**FRET**

Set 2

9/11

h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

cgc tca cgc ctc ttc ata cgt tcc -NH2  
**gga acg tat gaa cag gcg**  
cca gca cag gga gtt gac ca  
**cca cat ttt tcc ata ctt t**

1294  
1295  
1296  
1297

Set 1-Set 4

h3A5 probe  
h3A5 probe  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac agt tga cct tca  
aac gag gcg cac agt tga cct tca  
aac gag gcg cac agt tga cct tca - HEX  
**tga agg tca act gtg cgc**  
gtg atg gcc agc aca ggg c  
**tac gtt ccc cac att ttt c**  
tac gtt ccc cac att ttt c

1298  
1299  
1300  
1301  
1302  
1303  
1304

Set 5  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

cgc tca cgc ctc agt tga cct tca  
**tga agg tca act gag gcg**  
gtg atg gcc agc aca ggg c  
**tac gtt ccc cac att ttt c**

1305  
1306  
1307  
1308

Set 6  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT  
FRET

aac gag gcg cac tcc tct caa gt -NH2  
**act tga gag gag tgc gc**  
cca ttg att tca aca tct ttc ttg caa ga  
**cta ata gca act ggg aat aat c**

1309  
1310  
1311  
1312

Set 7  
h3A5 probe  
h3A5 arrestor  
h3A5 invader  
h3A5 stacking oligo  
SRT

cgc tca cgc ctc tcc tct caa gt - NH2  
**act tga gag gag agg cg**  
cca ttg att tca aca tct ttc ttg caa ga  
**cta ata gca act ggg aat aat c**

1313  
1314  
1315  
1316



FRET

Set 8  
h3A5 probe aac gag gcg cac agt tga cct tc - NH2  
h3A5 arrestor **tga agg tca act gfg cgc**  
h3A5 invader gfg atg gcc agc aca ggg c  
h3A5 stacking oligo **ata cgt tcc cca cat ttt tc**  
SRT  
FRET

1317  
1318  
1319  
1320

Set 1

h3A7 Probe tgg cgt atc tgg att aaa tct taa aag  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
Capture Oligo

1321  
1322

Set 2

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor **CTTTTAAGATTTAATCCAGTGCG-NH2**  
SRT  
FRET

1323  
1324  
1325

Set 3

h3A7 Primary Probe AACGAGGCGCACTGGATTAAATCTTAAAG  
h3A7 Invader gac ttt tat tga gag aac gaa tgg atc taa a  
h3A7 Arrestor **CTTTTAAGATTTAATCCAGTGCG-NH2**  
h3A7 Stacking Oligo **ctt ctt ggt gtt ttc ca**  
SRT  
FRET

1326  
1327  
1328  
1329

Set 4

h3A7 Probe agg agc cac tca tcc ctt gac t  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta  
Capture Oligo

1330  
1331

Set 5/Set 6

h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT  
h3A7 Primary Probe AACGAGGCGCACCTCATCCCTTGACT-NH2  
h3A7 Arrestor **AGTCAAGGGATGAGGTGCG-NH2**  
h3A7 Invader oligo ctt agg gaa atc agg ctc cac tta cgg ta

1332  
1333  
1334  
1335

SRT  
FRET

Set 7 - Set 10

h3A7 Primary Probe	aac gag gcg cac ctc atc cct tga c-NH2
h3A7 Arrestor	<b>gtc aag gga tga ggt gcg c-NH2</b>
h3A7 Invader oligo	ctt agg gaa atc agg ctc cac tta cgg ta
h3A7 Stacking Oligo	tca gcc ttg aga aca atg ggt ttg ttg ag3'
h3A7 Stacking Oligo	<b>tca gcc ttt aga aca atg ggt ttt tct g</b>
h3A7 Stacking Oligo	<b>ctc agc ctt tag aac aat ggg ttt ttc t</b>
h3A7 Stacking Oligo	<b>ctc agc ctt tag aac aat ggg ttt ttc t</b>

SRT  
FRET

Set 11

h3A7 Primary Probe  
h3A7 Primary Probe  
h3A7 Arrestor  
h3A7 Invader oligo  
h3A7 Stacking Oligo

SRT  
FRET

Set 1

Sequence	5' to 3'
h3A7 Probe	ata cgg ttg gta aag taa ttt gag gt
h3A7 Invader	gaa gcc cgt ctt cat ttc agg gtt cta ttt c
Capture Sequence	

Set 2

Seq.	h3A7 Primary Probe	h3A7 Invader	h3A7 Arrestor	SRT	FRET
	AACGAGGCGCACGTAAGTAATTGAGGT	gaa ggc cgt ctt cat ttc agg gtt cta ttt c	<b>ACCTCAAAATTACITTTACGTGCG-NH2</b>		

Set 3

h3A7 Primary Probe  
 AACGAGGCGCACGTAAAGTAATTTGAGGT  
 h3A7 Invader  
 gaa ggc cgt ctt cat ttc agg gtt cta ttt c  
 h3A7 Arrestor  
 ACCTCAAATTACITTTACGTGCG-NH2  
 h3A7 Stacking Oligo  
 ctc tgg tgt tct ggg

SRT  
FRET

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1357  
1358  
1359  
1360

Set 2 - Set 4

h3A7 probe  
h3A7 probe  
h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1361  
1362  
1363  
1364  
1365  
1366

Set 1

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1367  
1368  
1369  
1370

Set 2

h3A7 probe  
h3A7 arrestor  
h3A7 invader  
h3A7 stacking oligo

SRT  
FRET

1371  
1372  
1373  
1374

Set 1

h3A7 probe  
h3A7 arrestor

SRT  
FRET

1375  
1376

h3A7 invader	gga aat cag gct cca ctt acg gtc a	1377
h3A7 stacking oligo	<u>act cag cct tta gaa caa tg</u>	1378
SRT		
FRET		

Set 1		
h3A7 probe	cog tca cgc ctc taa agt aat ttg agg tc -NH2	1379
h3A7 arrestor	<u>gac ctc aaa tta ctt tag agg cg</u>	1380
h3A7 invader	cgt ctt cat ttc agg gtt cta ttt ga	1381
h3A7 stacking oligo	<u>tct ggt gtt ctg gg</u>	1382
SRT		
FRET		

Set 2		
h3A7 probe	aac gag gcg cac taa agt aat ttg agg tc - NH2	1383
h3A7 arrestor	<u>gac ctc aaa gga ctt tag tgc gc</u>	1384
h3A7 invader	cgt ctt cat ttc agg gtt cta ttt ga	1385
h3A7 stacking oligo	<u>tct ggt gtt ctg gg</u>	1386
SRT		
FRET		

Set 1		
r4A1 Probe	tgg-cgt-atc-tag-gct-ttg-ctt-cc	1387
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1388
Capture Sequence		

Set 2		
r4A1 Primary Probe	AACGAGGCGCACTAGGCTTTTGCTTCC	1389
r4A1 Arrestor	<u>GGAAAGCAAAGCCTAGTGCG-NH2</u>	1390
r4A1 Arrestor	<u>gga agc aaa gcc tag tgc gc-NH2</u>	1391
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1392
FRET Probe 1		

Set 3		
r4A1 Primary Probe	aac gag gcg cac tag gct ttg ctt ccc-NH2	1393
r4A1 Arrestor	<u>ggg aag caa agc cta gtc cgc-NH2</u>	1394
r4A1 Invader	ttc atg tag tca ggg tca tag aca att aag a	1395
SRT		
FRET Probe 1		

Set 4  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ctt c-NH2 1396  
 r4A1 Arrestor **gaa gca aag cct agt gcg c** 1397  
 r4A1 Stackers ccc aga acc atc gag gaa agg c 1398  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1399  
 SRT  
 FRET Probe 1

Set 5  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ctt ctt-NH2 1400  
 r4A1 Arrestor aag caa agc cta gtg cgc-NH2 1401  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1402  
 r4A1 Stackers ccc cag aac cat cga gga aag g 1403  
 r4A1 Stackers **ccc cag aac cat cga gga aag g** 1404  
 SRT  
 FRET Probe 1

Set 6  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct-NH2 1405  
 r4A1 Primary Probe aac gag gcg cac tag gct ttg ct - HEX 1406  
 r4A1 Probe aac gag gcg cac tag gct ttg ct 1407  
 r4A1 Arrestor **agc aaa gcc tag tgc gc-NH2** 1408  
 r4A1 Arrestor **agc aaa gcc tag tgc gc** 1409  
 r4A1 Invader ttc atg tag tca ggg tca tag aca att aag a 1410  
 r4A1 Stackers tcc cca gaa cca tgc agg aaa gg 1411  
 r4A1 Stackers **tcc cca gaa cca tgc agg aaa gg** 1412  
 SRT  
 FRET Probe 1

Set 1  
 r4A1 Probe ata cgg ttg gtc ttg acc tgc c 1413  
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac 1414  
 Capture Sequence

Set 2  
 r4A1 Primary Probe AACGAGGCGCACGCTCTTGACCTGCC 1415  
 r4A1 Arrestor **GGCAGGTCAAGACGTGCG-NH2** 1416  
 r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac 1417

SRT  
FRET Probe 1

Set 3  
r4A1 Primary Probe AACGAGGCGCACGTCTTGACCTGC-Pi  
r4A1 Arrestor GGCAGGTCAAGACGTCG-NH2  
r4A1 Invader agg aga tat gtt gaa aga ttt cta tag agg ac  
SRT  
FRET Probe 1

1418  
1419  
1420

Set 1  
r4A1 Probe tgg cgt atc tta gat gga gta agg a  
r4A1 Invader att cct cat aat tca aaa ggg act tag tag gt

1421  
1422

Set 2  
r4A1 Primary Probe AACGAGGCGCACTTAGATGGAGTAAGGA  
r4A1 Arrestor TCCCTACTCCAICTAAGTCG-NH2  
SRT  
FRET Probe 1

1423  
1424

Set 1  
r4A1 Primary Probe aac gag gcg cac tgg ata ccc ttg gg-NH2  
r4A1 Arrestor ccc.aag.ggt.atc.cag.tgc.gc-NH2  
r4A1 Invader ggt gga gac cat aaa tgg aga glg tga cta  
SRT  
FRET Probe 1

1425  
1426  
1427

Set 1  
r4A2 Probe aac gag gcg cac agg tgt ctg gag taa aag-NH2  
r4A2 Arrestor ctt.tta.ctc.cag.aca.cct.gtg.cgc-NH2  
r4A2 Invader gtc cac gca caa gct ggg ac  
SRT  
FRET Probe 1

1428  
1429  
1430

Set 1  
r4A2 Probe aac gag gcg cac aga agg ccc ctt-NH2  
r4A2 Arrestor aag.ggg.cct.tct.gtg.cgc-NH2  
r4A2 Invader cct tga aca gca cca gaa ata gac tga gca c  
r4A2 stacking oligo gga aga acc cag aga cac cat cc  
SRT

1431  
1432  
1433  
1434

186

FRET Probe 1

Set 2

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT

ccg tca cgc ctc aga agg ccc ctt-NH2  
aag ggg cct tct gag gcg-NH2  
cct tga aca gca cca gaa ata gac tga gca c

1435  
1436  
1437

FRET Probe 1

Set 3

r4A2 Probe  
r4A2 Arrestor  
r4A2 Invader  
SRT

aac gag gcg cac aga agg ccc ctt g-NH2  
caa ggg gcc ttc tgt gcg c-NH2  
cct tga aca gca cca gaa ata gac tga gca c

1438  
1439  
1440

FRET Probe 1

Set 4

r4A2 Probe  
r4A2 Probe  
r4A2 Probe  
r4A2 Arrestor  
r 4A2 Arrestor  
r4A2 Invader  
SRT

aac gag gcg cac aga agg ccc ctt gg-NH2  
aac gag gcg cac aga agg ccc ctt  
aac gag gcg cac aga agg ccc ctt - HEX  
cca agg ggc ctt ctg tgc gc-NH2  
aag ggg cct tct gtg cgc  
cct tga aca gca cca gaa ata gac tga gca c

1441  
1442  
1443  
1444  
1445  
1446

FRET Probe 1

Set 1

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
SRT

aac gag gcg cac ttg aca gag tcc gc-NH2  
gcg gac tct gtc aag tgc gc-NH2  
gct tct ccc att tgt cta gca tta taa

1447  
1448  
1449

FRET Probe 1

Set 2

r4A3 Probe  
r4A3 Arrestor  
r4A3 Invader  
r4A3 stacking oligo  
SRT

aac gag gcg cac ttg aca gag tcc g-NH2  
cgg act ctg tca agt gcg c-NH2  
gct tct ccc att tgt cta gca tta taa  
cca tga ttt tga cat agg gtt tga gga tg

1450  
1451  
1452  
1453

FRET Probe 1

156

Set 3  
 r4A3 Probe  
 r4A3 Probe  
 rCYP 4A3 Probe  
 r4A3 Arrestor  
 rCYP 4A3 Arrestor  
 r4A3 Invader  
 r4A3 stacking oligo  
 SRT  
 FRET Probe 1

aac gag gcg cac ttg aca gag tcc-NH2  
 aac gag gcg cac ttg aca gag tcc  
 aac gag gcg cac ttg aca gag tcc - HEX  
 gga ctc tgt caa gtc cgc-NH2  
 gga ctc tgt caa gtc cgc  
 gct tct ccc att tgt cta gca tta taa  
 gcc atg att ttg aca tag ggt ttg agg atg

SRT

FRET Probe 1

Set 1  
 r2B1 probe  
 r2B1 invader  
 Capture Sequence

cgg agc ctc tgc ggt cat caa g  
 tgg ata act gca tca gtc tat ggc att tta a

Set 2/ Set 3  
 r2B1 probe  
 r2B1 probe  
 r2B1 invader  
 Capture Sequence

gtg-gcg-tat-ctg-cgg-tca-tca-ag  
 gtg-gcg-tat-ctg-cgg-tca-tca-a  
 tgg ata act gca tca gtc tat ggc att tta a

Set 4  
 r2B1 probe  
 r2B1 invader  
 Capture Sequence

tg-gcg-tat-ctg-cgg-tca-tca-a  
 tgg ata act gca tca gtc tat ggc att tta a

Set 5 - Set 7  
 r2B1 probe  
 r2B1 arrestor  
 r2B1 arrestor  
 r2B1 arrestor  
 r2B1 invader  
 SRT  
 FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a  
 ttg-atg-acc-gca-ggt-gcg-cc-NH2  
 ttg-atg-acc-gca-ggt-gcg-cc-Pi  
 ttg-atg-acc-gca-ggt-gcg-cc-OH  
 tgg ata act gca tca gtc tat ggc att tta a

Set 8  
 r2B1 probe

aac-gag-gcg-cac-ctg-cgg-tca-tca-a



r2B1 arrestor  
r2B1 invader  
r2B1 stacker  
SRT  
FRET

**ttg-atg-acc-gca-ggt-gcg-cc-Pi**

tgg ata act gca tca gtg tat ggc att tta a  
ggg ttg gta gcc tgt gtg agc cga t

1475  
1476

## Set 9

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-a-NH2

**ttg-atg-acc-gca-ggt-gcg-NH2**

tgg ata act gca tca gtg tat ggc att tta a

1477  
1478  
1479

## Set 10

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

ggc-aac-gag-gca-cac-ctg-cgg-tca-tca-ag-Pi

**ttg-atg-acc-gca-ggt-gcg-cc-Pi**

tgg ata act gca tca gtg tat ggc att tta a

1480  
1481  
1482

## Set 11

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac-gag-ggg-cac-ctg-cgg-tca-tca-ag-NH2

ctt gat gac cgc agg tgc c-NH2

tgg ata act gca tca gtg tat ggc att tta a

1483  
1484  
1485

## Set 12

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

aac-gag-gcg-cac-ctg-cgg-tca-tca-agg-NH2

**cct tga tga ccg cag gtg cg-NH2**

tgg ata act gca tca gtg tat ggc att tta a

1486  
1487  
1488

## Set 13

r2B1 probe  
r2B1 arrestor  
r2B1 invader  
SRT  
FRET

atg acg tga cag acc tgc ggt cat caa g-NH2

**ctt gat gac cgc agg tct gt-NH2**

tgg ata act gca tca gtg tat ggc att tta a

1489  
1490  
1491

1011

Set 14	aac gag gcg cac ctg agg tca tca a-NH2	1492
r2B1 probe	<b>ttg atg acc tca ggt gcg-NH2</b>	1493
r2B1 arrestor	tgg ata act gca tca ctg tat ggc att tta a	1494
r2B1 invader		
SRT		
FRET		
Set 15	cag tca cgt ctc ctg cgg tca tca ag-NH2	1495
r2B1 probe	<b>ctt gat gac cgc agg aga cg-NH2</b>	1496
r2B1 arrestor	tgg ata act gca tca ctg tat ggc att tta a	1497
r2B1 invader		
SRT		
FRET		
Set 16	cag tca cgt ctc act gcg gtc atc aag-NH2	1498
r2B1 probe	gtg gat aac tgc atc agt gta tgg cat ttt c	1499
r2B1 invader	<b>ctt gat gac cgc agt gag acg-NH2</b>	1500
r2B1 arrestor		
SRT		
FRET		
Set 17	cag tca cgt ctc act gcg gtc atc aa-NH2	1501
r2B1 probe	<b>ttg atg acc gca gtg aga cg-NH2</b>	1502
r2B1 arrestor	gtg gat aac tgc atc agt gta tgg cat ttt c	1503
r2B1 invader	ggg ttg gta gcc tgt gtg agc cga t	1504
r2B1 stacker		
SRT		
FRET		
Set 18	cag tca cgt ctc act gcg gtc atc a-NH2	1505
r2B1 probe	<b>tga tga cgc cag tga gac g-NH2</b>	1506
r2B1 arrestor	gtg gat aac tgc atc agt gta tgg cat ttt c	1507
r2B1 invader	agg gtt ggt agc ctg tgt gag ccg a	1508
r2B1 stacker		
SRT		
FRET		
Set 19	cag tca cgt ctc act gcg gtc atc aag-NH2	1509
r2B1 probe		

**ctt gat gac cgc agt gag acg-NH2**  
 gtg gat aac tgc atc agt gta tgg cat ttt c  
 ggt tgg tag cct gtg tga gcc gat c

1510  
 1511  
 1512

r2B1 arrestor  
 r2B1 invader  
 r2B1 stacker  
 SRT  
 FRET

**cag tca cgt ctc act gcg gtc at-NH2**  
**atg acc gca gtg aga cg-NH2**  
 gtg gat aac tgc atc agt gta tgg cat ttt c  
 caa ggg ttg gta gcc tgt gtg agc c

1513  
 1514  
 1515  
 1516

Set 20  
 r2B1 probe  
 r2B1 arrestor  
 r2B1 invader  
 r2B1 stacker  
 SRT  
 FRET

**ccg tca cgc ctc act gcg gtc atc a-NH2**  
**tga tga ccg cag tga gcc g-NH2**  
 gtg gat aac tgc atc agt gta tgg cat ttt c  
 agg gtt ggt agc ctg tgt gag ccg a

1517  
 1518  
 1519  
 1520

Set 21  
 r2B1 probe  
 r2B1 arrestor  
 r2B1 invader  
 r2B1 stacker  
 SRT  
 FRET

**ccg tca cgc ctc act gcg gtc atc-NH2**  
**gat gac cgc agt gag ccg-NH2**  
 gtg gat aac tgc atc agt gta tgg cat ttt c  
 aag ggt tgg tag ccg gtg tg

1521  
 1522  
 1523  
 1524

Set 22  
 r2B1 probe  
 r2B1 arrestor  
 r2B1 invader  
 r2B1 stacker

**ccg tca cgc ctc act gcg gtc at-NH2**  
**ccg tca cgc ctc act gcg gtc at**  
**atg acc gca gtg agg cg-NH2**  
 gtg gat aac tgc atc agt gta tgg cat ttt c  
 caa ggg ttg gta gcc tgt gtg agc c

1525  
 1526  
 1527  
 1528  
 1529

Set 23  
 r2B1 probe  
 r2B1 probe  
 r2B1 arrestor  
 r2B1 invader  
 r2B1 stacker  
 SRT  
 FRET

**atg gtg tct ttg gtg act ctg tgt ggt aca**  
**aac-gag-gcg-cac-tcc-aat-agg-gac-aag**

1530  
 1531

Set 1  
 r2B1 invader  
 r2B1 probe



Set 4	aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-Pi <u>ctt-gcc-cca-att-ggt-gtg-cgc-c-Pi</u> atg gfg tct ttg gfg act ctg tgt ggt aac	1552 1553 1554
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 5	<u>ctt gcc cca att ggt gtg cg-NH2</u> aac-gag-gcg-cac-acc-aat-tgg-ggc-aag-NH2 atg gfg tct ttg gfg act ctg tgt ggt aac atc tgc aaa tct ctg aat ctg gfg gat ga	1555 1556 1557 1558
r2B2 arrestor		
r2B2 probe		
r2B2 invader		
r2B2 stacker		
SRT		
FRET		
Set 6	ggc-aac-gag-gca-cac-aa-ttg-ggg-caa-g <u>ctt-gcc-cca-att-ggt-gtg-cgc-c-NH2</u> atg gfg tct ttg gfg act ctg tgt ggt aac	1559 1560 1561
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 7	aac gag gcg cac acc aat tgg ggc aag atc-NH2 <u>gat ctt gcc cca att ggt gtg cg-NH2</u> atg gfg tct ttg gfg act ctg tgt ggt aac	1562 1563 1564
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
SRT		
FRET		
Set 8	aac gag gcg cac acc aat tgg ggc aag-NH2 <u>ctt gcc cga att ggt gtg cg-NH2</u> atg gfg tct ttg gfg act ctg tgt ggt aac atc tgc aaa tct ctg aat ctg gfg gat ga	1565 1566 1567 1568
r2B2 probe		
r2B2 arrestor		
r2B2 invader		
r2B2 stacker		
SRT		
FRET		
Set 9	cag tca cgt ctg atg gfg gcc tgt g-NH2	1569
r2B2 probe		

r2B2 invader  
r2B2 arrestor  
SRT  
FRET

gta tgg cat ttt ggt acg atc atc aag ggc  
cac agg cca cca tga gac g-NH2

1570  
1571

Set 10

r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac ctg-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
cag gta att ggc tct gag acg-NH2  
atc aat ctc ctt ttg gac ttt ctc tgc g

1572  
1573  
1574  
1575

Set 11

r2B2 probe  
r2B2 invader  
r2B2 arrestor  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac ct-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
agg tga ttg gct ctg aga cg-NH2  
gat caa tct cct ttt gga ctt tct ctg c

1576  
1577  
1578  
1579

Set 12

r2B2 probe

FAM-cag tca cgt ctc aga gcc aat cac ct-NH2

1580

Set 13 / Set 14

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
r2B2 stacker  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac c-NH2  
ggg gat tgg ctc tga gac g-NH2  
cga tca tca agg gat ggt ggc ctg tgc  
gat caa tct cct ttt gga ctt tct ctg c  
tga tca atc tcc ttt tgg act ttc tct gc

1581  
1582  
1583  
1584  
1585

Set 15

r2B2 probe  
r2B2 arrestor  
r2B2 stacker  
r2B2 invader  
SRT  
FRET

cag tca cgt ctc aga gcc aat cac-NH2  
gtg att ggc tct gag acg-NH2  
ctg atc aat ctc ctt ttg gac ttt ctc tgc g  
cga tca tca agg gat ggt ggc ctg tgc

1586  
1587  
1588  
1589

Set 16

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

1590  
1591  
1592  
1593

Set 17

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

1594  
1595  
1596  
1597

Set 18

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

1598  
1599  
1600  
1601

Set 19

r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker  
SRT  
FRET

1602  
1603  
1604  
1605

Set 20-21

r2B2 probe  
r2B2 probe  
r2B2 arrestor  
r2B2 invader  
r2B2 stacker

1606  
1607  
1608  
1609  
1610

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Set 22

r2B2 probe cag tca cgt ctc atg gtc aaa gta ctg tgg-NH2 1611  
 r2B2 invader gga agt gct cag gat tga agg tgt ctg gc 1612  
 r2B2 arrestor cca cag tac ttt gac cat gag acg-NH2 1613

SRT

FRET

Set 23

r2B2 probe aac gag gcg cac atg gtc aaa gta ctg tgg-NH2 1614  
 r2B2 arrestor cca cag tac ttt gac cat gtc cgc-NH2 1615  
 r2B2 invader gga agt gct cag gat tga agg tgt ctg gc 1616

SRT

FRET

r2B2 probe cat acg gtt ggg cct gtc aga gc 1617  
 r2B2 invader cat ttt ggt acg atc atc aag gga tgg tc 1618

r3A1 probe agg agc cac ggg tcc caa atc 1619  
 r3A1 probe FL-agg agc cac ggg tcc caa atc 1620  
 r3A1 invader tcc cct gtt tct tga aaa gtc cat gtc tga 1621  
 r3A1 probe F-tcg cgt agt cgg gtc cca aat c 1622  
 r3A1 probe cat-ctt-cgc-gga-cgg-gtc-cca-aat-c 1623  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gcg-cc-NH2 1624  
 r3A1 probe aac-gag-gcg-cac-cgg-gtc-cca-aat-c-NH2 1625  
 r3A1 probe cat-ctt-cgc-gga-cgg-gtc-cca-aat-c - NH2 1626  
 r3A1 arrestor gga ttt ggg acc cgt ccg cga - NH2 1627  
 r3A1 arrestor gga-ttt-ggg-acc-cgt-ccg-cg -NH2 1628  
 r3A1 arrestor gga ttt ggg acc cgt ccg c - NH2 1629  
 r3A1 arrestor gga ttt ggg acc cgt ccg - NH2 1630  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gcg-c-NH2 1631  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gcg-NH2 1632  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gc-NH2 1633  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gcg-cct-NH2 1634  
 r3A1 arrestor gat-ttg-gga-ccc-ggt-gcg-cct-c-NH2 1635

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r3A1 probe aac gag gcg cac cgg gtc cca aat c-Pi 1636  
 r3A1 probe  
 r3A1 probe



r3A1 invader	tcc cct gtt tct tga aaa gtc cat g'tg tga	1637
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1638
r3A1 arrestor	<u>gat ttg gga ccc ggt gcg</u> -NH2	1639
r3A1 probe	aac gag gcg cac cgg gtc cca aat c-NH2	1640
r3A1 arrestor	<u>gga ttt ggg acc cgg tgc gc</u> -NH2	1641
r3A1 probe	aac gag gcg cac cgg gtc cca aat-NH2	1642
r3A1 arrestor	<u>att tgg gac ccc g'tg cgc</u> -NH2	1643
r3A1 stacker	ccg tag agg agc acc agg acg	1644
r3A1 probe	aac gag gcg cac cgg gtc cca aa-NH2	1645
r3A1 arrestor	<u>ttt ggg acc cgg tgc gc</u> -NH2	1646
r3A1 stacker	tcc gta gag gag cac cag ga	1647
r3A1 probe	cag tca cgt ctc cgg gtc cca aa-NH2	1648
r3A1 arrestor	<u>ttt ggg acc cgg aga cg</u> -NH2	1649
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1650
r3A1 probe	ccg tca cgc ctc cgg gtc cca aa-NH2	1651
r3A1 arrestor	<u>ttt ggg acc cgg agg cg</u> -NH2	1652
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1653
r3A1 stacker	<u>tcc gta gag gag cac cag ga</u>	1654
r3A1 probe	aac gag gcg cac cgg gtc cca-NH2	1655
r3A1 arrestor	<u>tgg gac ccc g'tg cgc</u> -NH2	1656
r3A1 probe	ccg tca cgc ctc cgg gtc cca-NH2	1657
r3A1 arrestor	<u>tgg gac ccc gag gcg</u> -NH2	1658
r3A1 stacker	aat ccg tag agg agc acc agg	1659
r3A1 probe	aac gag gcg cac cgg gtc cca	1660

r3A2 invader	ttc ctt gtt tct taa aaa ttc cat gtc taa	1661
r3A2 invader	att ttt cga tac ttt tta tag cac tcc atc	1662
r3A2 probe	tgg cgt atc tgg gtt cca agt c	1663
r3A2 probe	aac gag gcg cac gtc aaa tct ccc taa	1664
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c	1665
r3A2 arrestor	<u>tta ggg aga ttt gac g'tg cgc c</u> - NH2	1666
r3A2 arrestor	<u>gac-ttg-gaa-ccc-agt-gcg-cc</u> -NH2	1667
r3A2 probe	aac gag gcg cac tgg gtt cca agt c	1668
r3A2 probe	aac-gag-gcg-cac-tgg-gtt-cca-agt-c-Pi	1669
r3A2 arrestor	<u>gac ttg gaa ccc agt gcg</u> -NH2	1670
r3A2 probe	aac gag gcg cac tgg gtt cca agt cg-NH2	1671
r3A2 arrestor	<u>cga ctt gga acc cag tgc gc</u> -NH2	1672
r3A2 probe	aac gag gcg cac aac cat caa gtt cta ta-NH2	1673

r3A2 invader	gga atc gtc act act gac cct ttg ggt ata aac ac	1674
r3A2 stacker	tct ttt tta cag act ctc tca agt cta tta cc	1675
r3A2 arrestor	<u>tat aga act tga tgg ttg tgc gc-NH2</u>	1676
r3A2 probe	aac gag gcg cac aac cat caa gtt cta-NH2	1677
r3A2 stacker	tat ctt ttt tac aga ctc tct caa gtc tat tac c	1678
r3A2 arrestor	<u>tag aac ttg atg gtt gtc gcg-NH2</u>	1679
r3A2 probe	cag tca cgt ctc ctc ggc agg gc-NH2	1680
r3A2 invader	cac aat atc gta ggt agg agg tgc ctt aa	1681
r3A2 arrestor	<u>gcc ctg ccg agg aga cg-NH2</u>	1682
r3A2 probe	cag tca cgt ctc ctc ggc agg g-NH2	1683
r3A2 stacker	ccc cat cga tct cct cct g	1684
r3A2 arrestor	<u>ccc tgc cga gga gac g-NH2</u>	1685
r3A2 probe	cag tca cgt ctc ctc ggc agg-NH2	1686
r3A2 stacker	gcc cca tgg atc tcc tcc	1687
r3A2 arrestor	<u>cct gcc gag gag acg-NH2</u>	1688
r3A2 probe	cag tca cgt ctc ctc ggc ag-NH2	1689
r3A2 stacker	ggc ccc atc gat ctc ctc	1690
r3A2 arrestor	<u>ctg ccg agg aga cg-NH2</u>	1691
r3A2 probe	ccg tca cgc ctc ctc ggc agg-NH2	1692
r3A2 arrestor	<u>cct gcc gag gag gcg-NH2</u>	1693
r3A2 stacker	<u>gcc cca tgg atc tcc tcc</u>	1694
r3A2 probe	ccg tca cgc ctc ctc ggc agg	1695
hICAM-1 probe	ccg tca cgc ctc ggc ttg tgt gtt c-NH2	1696
hICAM-1 invader	ccg gga tag gtt cag gga ggc gtc	1697
hICAM-1 stacker	<u>ggt ttc atg ggg gtc cct</u>	1698
hICAM-1 arrestor	<u>gaa cac aca agc cga ggc g</u>	1699
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tgg-NH2	1700
hVCAM-1 arrestor	<u>cca aac aaa ggc gag gcg</u>	1701
hVCAM-1 invader	ggg caa cat tga cat aaa gtg ttt gcg tac tct c	1702
hVCAM-1 stacker	<u>ggt cga att cca tgt cat c</u>	1703
hVCAM-1 probe	ccg tca cgc ctc gcc ttt gtt tg-NH2	1704
hVCAM-1 arrestor	<u>caa aca aag gcg agg cg</u>	1705
hVCAM-1 stacker	<u>ggt tgc aat tcc atg tca tc</u>	1706
hGAPDH probe	aac gag gcg cac gct cct gga aga tg-NH2	1707
hGAPDH arrestor	<u>cat ctt cca gga gcg tgc gcc-NH2</u>	1708

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hGAPDH invader cac ttg att ttg gag gga tct ca

## Secondary system oligos

Capture Oligo	aaa agt ggc tcc t-(biotin)c	1710
Capture Oligo	aaa aga ggc tcc gct-(biotin)c	1711
Capture Oligo	aaa atg tac gcc gct-(biotin) c	1712
Capture Oligo	aaa aga tac gcc aca gct-(biotin) c	1713
Capture Oligo	aaa acc aac cgt atg aac t-(biotin) c	1714
Capture Oligo	aaa atc ata cgc cac t-(biotin)c	1715
SRT	cgg-agg-aag-cag-ttg-gtg-tgc-ctc-gtt-gcc-tt-NH2	1716
SRT	cgg agg aag cag ttg ttg ccc ctc gtt aa-NH2	1717
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa-NH2	1718
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa-NH2	1719
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa	1720
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa	1721
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa	1722
SRT	cgg aag aag cag ttg ttg cgc ctc gtt aa	1723
SRT	cgg aag aag cag ttg gag gcg tga cgg t-NH2	1724
SRT	cgg aag aag cag ttg gag gcg tga cgg a-NH2	1725
SRT	cgg aag aag cag ttg gag gcg tga cgg a	1726
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1727
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1728
SRT	cgg aag aag cag ttg gag gcg tga cgg t	1729
SRT	cgg aag aag cag ttg gag gcg tga cgg a	1730
FRET probe	FL-caa c(cy3)gc ttc ctc	1731
FRET probe	FL-caa c(cy3)gc ttc ctc c	1732
FRET probe	FL-caa-c(cy3)g-cit-cct-ccg	1733
FRET probe	FL-caa-c(cy3)g-cit-cct-ccg-uuu	1734
FRET probe	FL-caa-c(cy3)g-cit-cct-ccg-uuu-u	1735
FRET probe	FL-caa-c(cy3)g-cit-cct-ccg-NH2	

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Oligo sequence descriptions:  
5' to 3' direction, 2'-Ome nts are bolded and underlined, internal modifications are defined in ( ), ASR of primary probes are underlined  
C18ddC = C18 linker+dideoxy C, ddC = dideoxy C, FI = Fluorescein

Oligo Type	Oligo Sequence	SEQ ID NO
<b>HUMAN IL-2</b>		
Human IL-2 Probe	FI- CGAAATTAATACGCCCTTCTTGGGCATGTAC -C18ddC	1736
Human IL-2 Probe	CGAAATTAATACGCCCTTCTTGGGCATGTAC -C18ddC	1737
Human IL-2 Invader	CTGAAGATGTTTCAGTTCTGTG- ddC	1738
Human IL-2 Invader	GAAGATGTTTCAGTTCTGTGCG	1739
Human IL-2 Probe	TCACCTCCTACCTTCTTGGGCATGTAA	1740
Human IL-2 Probe	TCACCTCCTACCTTCTTGGGCATGTAAAC	1741
Human IL-2 Probe	TCACCTCCTACCTTCTTGGGCATGTAA -C18ddC	1742
Human IL-2 Probe	GAAGATGTTTCAGTTCTGTG- ddC	1743
Human IL-2 Invader	FI- ACTTCCTACCTTCTTGGGCATGTAAAC	1744
Human IL-2 Probe	ACTTCCTACCTTCTTGGGCATGTAAAC -C18ddC	1745
Human IL-2 Probe	GAGTTGGGATCTTGTAAATAT -ddC	1746
Human IL-2 Invader	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1747
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1748
Human IL-2 Probe	GAGTTGGGATCTTGTAAATAT - ddC	1749
Human IL-2 Invader	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1750
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1751
Human IL-2 Probe	FI- CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1752
Human IL-2 Probe	CGTGTCTGTGGCGTATCTTAAATTCATTCATAATC	1753
Human IL-2 Probe	GAGTTGGGATCTTGTAAATAT -ddC	1754
<b>HUMAN <math>\beta</math>-ACTIN</b>		
Human $\beta$ -actin Probe	FI-TTCCTACTCTTGAATCTTCTTCTG	1755
Human $\beta$ -actin Invader	CTCAGGAGGAGCAATGATCTT	1756
Human $\beta$ -actin Invader	CTCAGGAGGAGCAATGAT	1757
Human $\beta$ -actin Probe	FI-TCACTTCTACTCTGGGTCATCTTCTG -C18ddC	1758
Human $\beta$ -actin Probe	TCACCTCCTACTCTGGGTCATCTTCTG -C18ddC	1759
Human $\beta$ -actin Invader	GTGTTGAAGGTCTCAAAACATGAT - ddC	1760
Human $\beta$ -actin Invader	GGGTGTTGAAGGTCTCAAAACATGAT - ddC	1761
Human $\beta$ -actin Probe	FI- CGTGTCTGTGGCGTATCTTGGGTCATCTTCTG	1762
Human $\beta$ -actin Probe	CGTGTCTGTGGCGTATCTTGGGTCATCTTCTG	1763
Human $\beta$ -actin Invader	GGGTGTTGAAGGTCTCAAAACATGAT - ddC	1764
<b>GAPDH</b>		
Human GAPDH Probe	FI- TTCATACGGTTGGTAGTTGAGGTCATG	1765
Human GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCATG	1766
Human GAPDH Invader	GGAATCATATTGGAACATGTAAACCATC	1767
Human GAPDH Probe	FI- TTCATACGGTTGGCTCCCTGGAAAGATG	1768

Human GAPDH Probe	TTCATACGGTTGGCTCTCTGGGAAGATG	1769
Human GAPDH Invader	CAC TTGATTTTGGAGGGAATCTCA	1770
Human/Mouse/Rat GAPDH Probe	TTCATACGGTTGGTAGTTGAGGTCAAIG	1771
Mouse/Rat GAPDH Invader	AGAATCATACTGGAACATGTAGACCATC	1772
Mouse GAPDH Probe	FI-TGGCGTATCAIGTAGTIGA	1773
Mouse GAPDH Probe	TGGCGTATCAIGTAGTIGA	1774
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACC	1775
Mouse GAPDH Probe	TGGCGTATCAIGTAGTIGA	1776
Mouse GAPDH Invader	AGTCATACTGGAACATGTAGACA	1777
Mouse GAPDH Invader	GGAGTCATACTGGAACATGTAGACA	1778
<b>MOUSE IL-6</b>		
Mouse IL-6 Probe	FI- TGGCGTATCICITTTTICATII	1779
Mouse IL-6 Probe	TGGCGTATCICITTTTICATII	1780
Mouse IL-6 Invader	ACAATCAGAAATTGCCATTGCACAACA	1781
<b>MOUSE ONCOSTATIN M</b>		
Mouse Oncostatin M Probe	FI-GAAGGCAGAGGACCGTGAGGC	1782
Mouse Oncostatin M Probe	GAAGGCAGAGGACCGTGAGGC	1783
Mouse Oncostatin M Invader	AAGACATCTGGTGTGTAGTGA	1784
Mouse Oncostatin M Probe	FI-TGGCGTATCICCCAGAGAAAAGC	1785
Mouse Oncostatin M Probe	TGGCGTATCICCCAGAGAAAAGC	1786
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1787
Mouse Oncostatin M Probe	FI- TGGCGTATCIAGGGCICCAAGAG	1788
Mouse Oncostatin M Probe	TGGCGTATCIAGGGCICCAAGAG	1789
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1790
Mouse Oncostatin M Probe	FI-TGGCGTATCIAGGGCICCAAG	1791
Mouse Oncostatin M Probe	TGGCGTATCIAGGGCICCAAG	1792
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1793
FRET Probe	FI-ATTC(CY3)TCTCAGA-3'NH2	1794
FRET Probe	FI-ATTC(CY3)TCTCAGAC-3'NH2	1795
FRET Probe	FI-ATTC(CY3)TCTCAGACT-3'NH2	1796
SRT	CAGTCTGAGATGAATGATACGCCCAGG-3'NH2	1797
Mouse Oncostatin M Arrestor	<b>CTTGGAGCCCTAGATA</b> -NH2	1798
Mouse Oncostatin M Arrestor	<b>CTTGGAGCCCTAGAT</b> -NH2	1799
Mouse Oncostatin M Arrestor	<b>CTTGGAGCCCTAGA</b> -NH2	1800
Mouse Oncostatin M Probe	CTGGCGTATCIAGGGCTCCA	1801
Mouse Oncostatin M Probe	CCTGGCGTATCIAGGGCTCCA	1802
Mouse Oncostatin M Invader	GTGTTCAAGTTTGGAGGCGGATAA	1803
SRT	CAGTCTGAGATGAATGATACGCCCAGG-3'NH2	1804
Arrestor	<b>CTTGGAGCCCTAGAT</b> -NH2	1805
Mouse Oncostatin M Probe	FI-CTCTCTCGTCTCTAGGGCTCCA	1806

Mouse Oncostatin M Probe	CTCTCTCGTCTCTAGGGCTCCCA	1807
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGCGATAA	1808
SRT	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1809
Mouse Oncostatin M Arrestor	CTTGAGCCCTAGAG-NH2	1810
Mouse Oncostatin M Probe	FI- TGCGGTATCTAGGGCTCCCA	1811
Mouse Oncostatin M Probe	TGGCGTATCTAGGGCTCCCA	1812
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGCGATAA	1813
Mouse Oncostatin M Probe	TGGCGTATCTCCCGCAGAGAAA	1814
Mouse Oncostatin M Probe	TGGCGTATCTCCCGCAGAGA	1815
Mouse Oncostatin M Invader	CACTGAGCCGATGAAGCGATGGTAA	1816
Mouse Oncostatin M Probe	TGGCGTATCTATAGGGCTC	1817
Mouse Oncostatin M Invader	GTGTTTCAGGTTTTGGAGCGCGAA	1818
Mouse Oncostatin M Probe	CTCTCTCGTCTCTTCAGGTTTIG	1819
Mouse Oncostatin M Probe	GGCAGCTCTCAGGTCAGGTGTGA	1820
Mouse Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1821
Mouse Oncostatin M Invader	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2	1822
SRT	FI-ATTTC(CY3)TCTCAGAC-3'NH2	1823
FRET Probe	CAAAACCTGAAGAGA-3'NH2	1824
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGAC-3'NH2	1825
Mouse Oncostatin M Arrestor	CAAAACCTGAAGAGACG-3'NH2	1826
Mouse Oncostatin M Probe	FI- CTCTCTCGTCTCTTCAGGTTTIG	1827
Mouse Oncostatin M Probe	CTCTCTCGTCTCTTCAGGTTTIG-NH2	1828
Mouse Oncostatin M Invader	GGCAGCTCTCAGGTCAGGTGTGA	1829
Mouse Oncostatin M Stack	GAGCGGATATAGGGCT- Biotin TEG	1830
<b>HUMAN ONCOSTATIN M</b>		
Human Oncostatin M Probe	CTCTCTCGTCTCTAAGGACITTA	1831
Human Oncostatin M Probe	CTCTCTCGTCTCTAAGGACITTA	1832
Human Oncostatin M Invader	GAAACAGGAGTGCAAGGACACAGACA	1833
Human Oncostatin M Probe	TCACGTCTCTTCAGGTTTIG	1834
Human Oncostatin M Probe	GTCACGTCTCTTCAGGTTTIG	1835
Human Oncostatin M Probe	AGTCACGTCTCTTCAGGTTTIG	1836
Human Oncostatin M Probe	CAGTCACGTCTCTTCAGGTTTIG	1837
Human Oncostatin M Invader	AGGCAGCTCTCAGGTCAGGTGTGA	1838
Fret Probe 1	FI- CAAC(CY3)GCTTCCTCCG	1839
SRT	CGGAGGAAGCAGTTGGAGACGTGACTGIGG-NH2	1840
SRT with mismatch	CGGAAGAAAGCAGTTGGAGACGTGACTGIGG-NH2	1841
SRT with mismatch	CGGACGAAGCAGTTGGAGACGTGACTGIGG-NH2	1842

bold indicates 2' o-methyl bases

Oligo Type	Oligo Sequence	Oligo #	SEQ ID NO
<b>SECONDARY SYSTEM:</b>			
<b>SET 1</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1843
secondary target	5'-CGGAAGAAGCAGTTGGTGCGCCCTCGTTAA-NH2	649-10-01	1844
<b>SET 2</b>			
FRET probe 1	5'-F-CAAC(CY3)GCTTCCTCCG-3'	DB04001F6	1845
secondary target	5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'	641-60-03	1846
<hr/>			
h2C19 designs 2			
probe	5'-AACGAGGGCAGCATGTCCATCGA-NH2-3'	971-26-09	1847
stacker	5'-TTCTTGGTGTCTTTACTTTCTC-3'	971-26-12	1848
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTT	971-26-11	1849
arrestor	5'-TCGATGGACATCGTGCCG-3'	971-26-10	1850
SET 1			
h 2D6 p450 designs			
probe	5'-CCGTACGCCCTCTCACCCTCT-NH2-3'	971-11-01	1851
stacker	5'-CTGGTCGCCGACCT-3'	971-11-04	1852
invader	5'-TGTAGGGCATGTGAGCCTGGA-3'	971-11-03	1853
arrestor	5'-AGATGGGAGAGAGGCG-3'	971-11-02	1854
SET 2			
probe	5'-CCGTACGCCCTCGAAGCCCTGT-NH2-3'	971-11-05	1855
stacker	5'-ACTTCGATGTACGGGATGTCATATGG-3'	971-11-08	1856
invader	5'-GAGTGTGTTCCCTTAGGGATGCCG-3'	971-11-08	1857
arrestor	5'-ACAGGGCTTCGAGGCG-3'	971-11-06	1858
SET 2			
probe	5'-CCGTACGCCCTCCCTGTGAGAAAG-NH2-3'	971-11-09	1859
stacker	5'-GCAGGAAGGCCCTCCG-3'	971-11-12	1860
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1861
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1862
SET 2			

1151

h 2D6 shroter designs

probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-HEX-3'	1051-12-06	1863
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-3'	1051-12-05	1864
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAA-NH2-3'	971-38-01	1865
invader	5'-CCCGAGGCATGCACGGCGGA-3'	971-11-11	1866
stacker	5'-GGCAGGAAGGCCTCC-3'	971-38-03	1867
arrestor	5'-TTTCTCAGCAGGGAGGCG-3'	971-38-02	1868
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGA-NH2-3'	971-38-07	1869
invader		971-11-11	
stacker	5'-AAGGCAGGAAGGCCTCC-3'	971-38-09	1870
arrestor	5'-TCTCAGCAGGGAGGCG-3'	971-38-08	1871
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAA-NH2-3'	971-38-04	1872
invader		971-11-11	
stacker	5'-AGGCAGGAAGGCCTGG-3'	971-38-06	1873
arrestor	5'-TTCTCAGCAGGGAGGCG-3'	971-38-05	1874
SET 2			
probe	5'-CCGTCACGCCCTCCCTGCTGAGAAAG-NH2-3'	971-11-09	1875
invader		971-11-11	
stacker	5'-GCAGGAAGGCCTCCG-3'	971-11-12	1876
arrestor	5'-CTTTCTCAGCAGGGAGGCG-3'	971-11-10	1877
SET 2			
h 2B6 p450 alt. Splice designs			
probe	5'-AACGAGGCGCACCATATCCC-NH2-3'	1051-48-01	1878
invader	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-03	1879
stacker	5'-CGGAAGAATGGGTCGACCATG-3'	971-01-04	1880
arrestor	5'-GGGATATGGTGTCGCG-3'	1051-48-02	1881
SET 1			
probe	5'-CCGTCACGCCCTCCACCATATCCC-HEX-3'	1051-12-02	1882
probe	5'-CCGTCACGCCCTCCACCATATCCC-3'	1051-12-01	1883
probe	5'-CCGTCACGCCCTCCACCATATCCC-NH2-3'	971-01-01	1884
invader		971-01-03	
stacker		971-01-04	
arrestor	5'-GGGATATGGTGAGGCG-3'	971-01-02	1885

1161



SET 2

probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGCGCACCAGAGCTGATGAG-NH2-3'  
5'-GAGAAGAGCTCAACACAGCTGGCCGAATAA-3'  
5'-TGAAAAAGTCTGGTAGAACAAAGTTCAGC-3'  
5'-CTCATCAGCTCTGGTGCGC-3'

1051-48-03  
971-01-10  
971-01-11  
1051-48-04

1886  
1887  
1888  
1889

probe

5'-CCGTCACGCCCTCCAGAGCTGATGAG-NH2-3'

971-01-08  
971-01-10  
971-01-11  
971-01-09

1890

SET 2

5'-CTCATCAGCTCTGGAGGCG-3'

1891

h 2B6 p450 alt.splice designs2

p  
l  
s  
a  
SET 1

5'-AACGAGGCGCACCCTTGGATTC-NH2-3'  
5'-CTGTTCAATCTCCCTGTAGACTCTCTA-3'  
5'-CGAAGCTCCTCTATCAG-3'  
5'-GAAATCCAAGGTGCGC-3'

1051-48-05  
1051-48-10  
1051-48-09  
1051-48-06

1892  
1893  
1894  
1895

p  
l  
s  
a  
SET 2

5'-CCGTCACGCCCTCCCTTGGATTC-NH2-3'

1051-48-07  
1051-48-10  
1051-48-09  
1051-48-08

1896

5'-GAAATCCAAGGAGGCG-3'

1897

p  
l  
s  
a  
SET 1

5'-AACGAGGCGCACTGAGGGCC-NH2-3'  
5'-GGAAGAGGAAGGTGGGTCCAA-3'  
5'-CCCTTGGATTTCCGAAG-3'  
5'-GGCCCTCAGTGCGC-3'

1051-48-11  
1051-48-16  
1051-48-15  
1051-48-12

1898  
1899  
1900  
1901

p  
l  
s  
a  
SET 2

5'-CCGTCACGCCCTCTGAGGGCC-NH2-3'

1051-48-13  
1051-48-16  
1051-48-15  
1051-48-14

1902

5'-GGCCCTCAGAGGCG-3'

1903

h2B6 p450 alt. Splice designs4

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probe	5'-AACGAGGGCGCACAAATACAGAGCTG-NH2-3'	1051-48-17	1904
invader	5'-GAGAAGAGCTCAAACAGCTGGCCGC-3'	1051-48-22	1905
stacker	5'-ATGAGTGAAAAAGTCTGGTAGAAC-3'	1051-48-21	1906
arrestor	5'-CAGCTCTGTATTGTGCGC-3'	1051-48-18	1907
SET 1			
probe	5'-CCGTCACGCCTCAATACAGAGCTG-NH2-3'	1051-48-19	1908
invader		1051-48-22	
stacker		1051-48-21	
arrestor	5'-CAGCTCTGTATTGAGGCG-3'	1051-48-20	1909
SET 2			
probe	5'-AACGAGGGCGCACGGTTGAGGTTCTG-NH2-3'	1051-48-23	1910
invader	5'-CAGCAAAGAAAGAGCGAGCGTGTGAC-3'	1051-48-28	1911
stacker	5'-GTGGCTGAATTCACGTG-3'	1051-48-27	1912
arrestor	5'-CAGAACCCTCAACCGTGCGC-3'	1051-48-24	1913
SET 1			
probe	5'-CCGTCACGCCTCGGTTGAGGTTCTG-NH2-3'	1051-48-25	1914
invader		1051-48-28	
stacker		1051-48-27	
arrestor	5'-CAGAACCTCAACCGAGGCG-3'	1051-48-26	1915
SET 2			
h2B6 p450 designs			
probe	5'-CCGTCACGCCTCCACCATATCCCCG-NH2-3'	971-01-06	1916
invader	5'-CCGTCACGCCTCCACCATATCCC-NH2-3'	971-01-03	1917
stacker	5'-CGGAAGAATGGTCGAC-3'	971-01-05	1918
stacker	5'-CGGAAGAATGGTCGACCATG-3'	971-01-04	1919
arrestor	5'-GGGATATGGTGGAGGCG-3'	971-01-02	1920
SET 2			
probe	5'-CCAGCGGTTTCCATTGGCAAAGATCAA-3'	971-01-01	1921
invader		971-01-03	
arrestor	5'-CGGGGATATGGTGGAGGCG-3'	971-01-07	1922
SET 2			
probe	5'-CCGTCACGCCTCCAGAGCTGATGAG-NH2-3'	971-01-08	1923
invader	5'-GAGAAGAGCTCAAACAGCTGGCCGAATAA-3'	971-01-10	1924
stacker	5'-TGAAAAAGTCTGTTAGAACAAAGTTCAGC-3'	971-01-11	1925

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200220 "64343001"  
5'-CTCATCAGCTCTGGAGGCG-3' 971-01-09

1926

arrestor  
SET 2

h2b6p450 designs 2

5'-CCGTCACGCCTCAGATGACTGCC-NH2-3'  
5'-GGAGAAAGTCGGAAAATCTCTGAATCTCATC-3'  
5'-TCTGTGTATGGCATTGCTCGG-3'  
5'-GGCAGTCATCTGAGGCG-3'

1927  
1928  
1929  
1930

SET 2

h 2C19 designs 1

5'-CCGTCACGCCTCCATCCTTAATATCTAT-NH2-3'  
5'-GAGAGATTGGTTAAGGATTTGCTGAA-3'  
5'-CTGTAGGATATTTCCAATCACTGGG-3'  
5'-ATAGATATTAAGGATGGAGGCG-3'

1931  
1932  
1933  
1934

SET 2

probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'  
5'-CATATCCATGCAGCACCAACCATGA-3'  
5'-CAAAATACAGAGTGAACACAGGGGCC-3'  
5'-GCCTGGAACGGTGCGC-3'

1935  
1936  
1937  
1938

h2C19 shorter site 2 designs

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'  
5'-CATATCCATGCAGCACCAACCATGA-3'  
5'-CCAAAATACAGAGTGAACACAGGGGCC-3'  
5'-CCTGGAACGGTGCGC-3'

1939  
1940  
1941  
1942

probe  
probe  
probe  
invader  
stacker  
arrestor  
SET 1

5'-AACGAGGGCGCACCGTTCAGGC-NH2-3'  
5'-AACGAGGGCGCACCGTTCAGGC-3'  
5'-AACGAGGGCGCACCGTTCAGGC-HEX-3'  
5'-CAAAATACAGAGTGAACACAGGGGCC-3'  
5'-GCCTGGAACGGTGCGC-3'

1943  
1944  
1945  
1946  
1947

rat 1A1, rat 1A2  
probe

Rat 1A1 site 1 bs. 639-700  
5'-CCGTCACGCCTCAGATTGACTATGCTG-NH2-3'

1948

1191

20040000 "SECRET"

invader	5'-CAGTAACCTCCCCAAACTCATTGCTTC-3'	500-58-03	1949
stacker	5'-AGCAGCTCTTGTCATCGT-3'	500-58-04	1950
arrestor	5'-CAGCATAGTCAATCTGAGGCG-3'	500-58-02	1951

SET 2

rat 1A2			
probe	Rat 1A2 site 1 bs. 674-725		
invader	5'-AACGAGGCGCACTGACATTCCTCCAC-NH2-3'	500-58-05	1952
stacker	5'-GTCCACAGCATTCCTGAGGA-3'	500-58-07	1953
arrestor	5'-AAAGTCCTTGCTGCTCTTC-3'	500-58-08	1954
	5'-GTGGAGAAATGTCAGTGCGGC-3'	500-53-06	1955

SET 1

rat 2B1-2B2 patent			
probe	5'-AACGAGGCGCACTGGCTTGACACA-NH2-3'	500-49-05	1956
invader	5'-GTCAATGTCTTGGAGCCAAAA-3'	500-49-03	1957
stacker	5'-GAGAAATTCTGGAGGATGGTGG-3'	r2B1, 2B2 500-49-07	1958
arrestor	5'-TGTGTCAAGCCAGTGCGGC-3'	500-49-06	1959

SET 1

probe	5'-AACGAGGCGCACTGGCTTGACACAG-NH2-3'	500-49-01	1960
invader		500-49-03	
stacker	5'-AGAAAGTTCTGGAGGATGGTGG-3'	r2B1, 2B2 500-49-04	1961
arrestor	5'-CTGTGTCAAGCCAGTGCGGC-3'	500-49-02	1962

SET 1

rat 2B1-2B2 site 4			
probe	PROBE SET 2 (r2B1 bs 1299-1353, r2B2 bs. 474-528)		
invader	5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3'	500-49-12	1963
stacker	5'-GTTCTGGAGGATGGTGAAGAAC-3'	500-49-10	1964
arrestor	5'-CGGGCAATGCCTTCG-3'	500-49-14	1965
	5'-AAATGAATTGTTCTCGTGCGGC-3'	500-49-13	1966

SET 2

probe	5'-AACGAGGCGCACGAGGAACAATTCATTT-NH2-3'	500-49-08	1967
invader		500-49-10	
stacker	5'-GGGCAATGCCTTCG-3'	500-49-11	1968
arrestor	5'-GAAATGAATTGTTCTCGTGCGGC-3'	500-49-09	1969

SET 1

rat 2B1-2B2 ,5 patent			
probe	5'-AACGAGGCGCACAGCTGAGAAAGCAG-NH2-3'	500-49-15	1970

1201

invader	5'-GCCTCAGCCGGATCACCGC-3'	r2B1, 500-49-17	1971
invader	5'-GCCTCAGCCCGATCACCGC-3'	r2B2, 500-49-18	1972
stacker	5'-ATCTGGTACGTTGGAGGTATT-3'	r2B1 500-49-20	1973
stacker	5'-ATCTGGTATGTTGGAGGTATT-3'	r2B2 500-49-21	1974
arrestor	5'-CTGCTTCTCAGCTCTGCCG-3'	500-49-16	1975

NOTE: all 3 invader/probe sets are designed to detect both 2B1 and 2B2

SET 1

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (570C)

p	5'-CCGTACAGCCTCGTCGAAACGTTTGT-NH2	500-40-04	1976
i	5'-CCTCAGACACTTCTTGTCATTGTAC-3'	500-40-02	1977
s	5'-GAAGAGGATATCCGCAATGACATTGC-3'	500-40-05	1978
a	5'-AACAAACGTTTTCGACGAGGCG-3'	500-40-06	1979

SET 2

p 5'-CCGTACAGCCTCGTCGAAACGTTTGTGAAG-NH2-3'

i	500-40-01	1980
s	500-40-02	
a	500-40-05	
	500-40-03	1981

SET 2

rat 2E1 p450 (af061442) 500-73 Rat 2E1 PROBE SET (822G) (designed over splice junction #5)

p	5'-CCGTACAGCCTCCTCCATCTCTATG-NH2-3'	500-40-10	1982
i	5'-GTTCTTGGCTGTGTTTTCCCTTA-3'	500-40-08	1983
s	5'-AGGAGACAGTCAGTCACATC-3'	500-40-11	1984
a	5'-CATAGAGATGGAGGAGGCG-3'	500-40-12	1985

SET 2

p 5'-CCGTACAGCCTCCTCCATCTCTATGAG-NH2-3'

i	500-40-07	1986
s	500-40-08	
a	500-40-11	
	500-40-09	1987

SET 2

Rat 2E1 PROBE SET (969G) Designed over splice junction #6

probe	5'-CCGTACAGCCTCCTCTTCAATTTCTG-HEX-3'	1073-19-06	1988
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1989
stacker	5'-GGTATTTTCATGAGGATCAGGAGC-3'	500-40-17	1990
arrestor	5'-CCAGAAATTGAAGAGGAGGCG-3'	500-40-15	1991

SET 2

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# 2020 "BEBOT"

probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-3'	1073-19-05	1992
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTG-NH2-3'	500-40-16	1993
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCTGG-NH2	500-40-13	1994
invader		500-40-14	
stacker		500-40-17	1995
arrestor		500-40-18	
SET 2	5'-CAGAAATTGAAGAGGAGGCG-3'		
Rat 2E1 PROBE SET (969G)	Designed over splice junction #6		
probe	5'-CCGTCACGCCCTCCTCTTCAATTTCT-NH2-3'	500-73-01	1996
invader	5'-CCCTGTCAATTTCTTCATGAAGTTTA-3'	500-40-14	1997
stacker	5'-GGGTATTTTCATGAGGATCAGGAG-3'	500-73-03	1998
arrestor	5'-AGAAATTGAAGAGGAGGCG-3'	500-73-02	1999
SET 2			
rat 3A's design 2			
probe	5'-CCGTCACGCCCTCGTTCCCTGGGT-NH2-3'	500-43-15	2000
invader	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2001
invader	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2002
invader	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A2 500-43-24	2003
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A1, 3A2, 3A18 500-43-19	2004
stacker	5'-CCATTTCCAAAGGCGAG-3'	short r3A9 500-43-20	2005
arrestor	5'-ACCCAGGAACGAGGCG-3'	500-43-16	2006
SET 2			
probe	5'-CCGTCACGCCCTCGTTCCCTGGGT-NH2-3'	500-43-13	2007
invader		r3A1, 3A18 500-43-23	
invader		r3A2 500-43-24	
arrestor		500-43-14	2008
SET 2	5'-GACCCAGGAACGAGGCG-3'		
rat 3A's desing 3			
probe	5'-CCGTCACGCCCTCTGAGAGCAAAACCT-NH2-3'	500-43-29	2009
invader	5'-AGAGCGAGTTTCATATTCAA-3'	r3A1, 3A2 500-43-35	2010
invader	5'-AGAGCAACTTTCATGTTCAA-3'	r3A9 500-43-36	2011
invader	5'-ACAGCAAGTTTCATGCTGAA-3'	r3A18 500-43-37	2012
stacker	5'-CATGCCAATGCAGTTCCTG-3'	r3A1, 3A18 500-43-31	2013
stacker	5'-CATGTCAATGCAGTTCCTG-3'	r3A2 500-43-32	2014
stacker	5'-CATGCCAATACAGTTCCTG-3'	r3A9 500-43-33	2015

1221

arrestor SET 2	5'-AGGTTTGCTCTCCGAGGCG-3'	500-43-30	2016
probe invader invader invader arrestor SET 2	5'-CCGTCACGCCTCTGAGAGCAAACCTCA-NH2-3'	500-43-27 r3A1, 3A2 500-43-35 r3A9 500-43-36 r3A18 500-43-37 500-43-28	2017
	5'-TGAGGTTTGCTCTCAGAGGCG-3'		2018
rat 3A's designs probe invader invader invader s s a SET 2	5'-CCGTCACGCCTCGGAACATCTCCT-NH2-3'	500-43-03	2019
	5'-TGCTCCATACTGTTCAATGATGGC-3'	r3A1, 3A2 500-43-09	2020
	5'-TATCTGTATACTGGTTAATGATGGC-3'	r3A9 500-43-10	2021
	5'-TATCTCCATACTGTCTCATGAGGGC-3'	r3A18 500-43-11	2022
	5'-TGAGTCTTCCACTGGTG-3'	r3A1, 3A2 500-43-05	2023
	5'-TGAGCTTCCCACTGGTG-3'	r3A9 500-43-06	2024
	5'-TGAGTTGCCACTGGTG-3'	r3A18 500-43-07	2025
probe invader invader invader arrestor SET 2	5'-CCGTCACGCCTCGGAACATCTCCTTGA-NH2-3'	500-43-01	2026
		r3A1, 3A2 500-43-09	
		r3A9 500-43-10	
		r3A18 500-43-11	
	5'-TCAAGGAGATGTTCCGAGGCG-3'	500-43-02	2027
rat 3A's design 2b probe invader invader invader stacker stacker arrestor SET 2	5'-CCGTCACGCCTCGTTCCGGG-NH2-3'	991-39-01	2028
	5'-GAGCAAAACCTCATGCCAATGCAC-3'	r3A1, 3A18 500-43-23	2029
	5'-GAGCAAAACCTCATGTCAATGCAC-3'	r3A2 500-43-24	2030
	5'-GAGCAAAACCTCATGCCAATACAC-3'	r3A9 500-43-25	2031
	5'-TCCATTTCCAAAGGCGAG-3'	r3A1, 3A2, 3A18 991-39-03	2032
	5'-TCCATTTCCAAAGGCGAG-3'	r3A9 991-39-04	2033
	5'-CCCAGGAACGAGGCG-3'	991-39-02	2034
rat or human 1A1 shorter site 2 probe probe	5'-CCGTCACGCCTCCTGTCTGTGAT-HEX-3'	1073-19-02	2035
	5'-CCGTCACGCCTCCTGTCTGTGAT-3'	1073-19-01	2036

009370" 5E24B00T

probe	5'-CCGTCACGCCTCCTGTCTGTGAT-NH2-3'	991-12-04	2037
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2038
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2039
stacker	5' -GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2040
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2041
SET 2			
probe	5'-CCGTCACGCCTCCTGTCTGTGATG-NH2-3'	991-12-01	2042
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-TCCCGGATGTGGCCCT-3'	rat/human 1A1 991-12-03	2043
arrestor	5'-CATCACAGACAGGAGGCG-3'	991-12-02	2044
SET 2			
probe	5'-CCGTCACGCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2045
invader		r 1A1 500-53-11	
invader		h 1A1 500-53-12	
stacker	5'-GTCCCGGATGTGGCCC-3'	rat/human 1A1 991-12-06	2046
arrestor	5'-ATCACAGACAGGAGGCG-3'	991-12-05	2047
SET 2			
rat or human 1A1 site 1			
probe	5'-CCGTCACGCCTCTGGCCCTTC-NH2-3'	500-53-04	2048
invader	5'-CTGTCTGTGATGTCCCGGATGA-3'	500-53-03	2049
stacker	5' -TCAAATGTCCTGTAGTGCTC- 3'	rat 1A1 500-53-06	2050
stacker	5' -TCAAAGGTTTTGTAGTGCTC- 3'	human 1A1 500-53-07	2051
arrestor	5'-GAAGGCCAGAGGCG-3'	500-53-05	2052
SET 2			
probe	5'-CCGTCACGCCTCTGGCCCTTCTC-NH2-3'	500-53-01	2053
invader		500-53-03	
arrestor	5'-GAGAAAGGCCAGAGGCG-3'	500-53-02	2054
SET 2			
Rat/Human 1A1 site 2			
probe	5'-CCGTCACGCCTCCTGTCTGTGATGT-NH2-3'	500-53-09	2055
invader	5'-TCCTGACAAATGCTCAATGAGGA-3'	r 1A1 500-53-11	2056
invader	5'-TCCTGACAGTGCTCAATCAGGA-3'	h 1A1 500-53-12	2057
stacker	5'-CCCGGATGTGGCCCT-3'	rat/human 1A1 500-53-14	2058
arrestor	5'-ACATCACAGACAGGAGGCG-3'	500-53-10	2059

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SET 2

rat or human 1A2 sites

probe	5'-AACGAGGCGCAGGACTGTTTCTGC-HEX-3'	1073-19-04	2060
probe	5'-AACGAGGCGCAGGACTGTTTCTGC-3'	1073-19-03	2061
probe	5'-AACGAGGCGCAGGACTGTTTCTGC-NH2-3'	500-53-15	2062
invader	5'-CTTGTGAAGTCTTGATAGTGTTCCTC-3'	rat 1A2 500-53-17	2063
invader	5'-CTTGTCAAAGTCTTGATAGTGTTCCTC-3'	human 1A2 500-53-18	2064
arrestor	5'-GCAGAAACAGTCCGTGCGC-3'	500-53-16	2065
SET 1			

shorter h2C19 design site 3

probe	5'-AACGAGGCGCAGGACTGTCCATCG-NH2-3'	971-48-01	2066
invader	5'-GCAATCAATAAAGTCCCGAGGGTTGTTTC-3'	971-26-11	2067
stacker	5'-ATTCTGGTGTCTTTTACTTTCTC-3'	971-48-03	2068
arrestor	5'-CGATGGACATCGTGC-3'	971-48-02	2069
SET 1			

## Human IL-10

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	SEQ ID NO
probe	aacgagcgccacccaactcactcatggt-NH2	511-31-01	FV-1 & FV-2	3' amine	2070
arrestor	agccatgagtgagttgtg	511-31-02		All 2'Ome + 3' amine arrestor for 511-31-01	2071
probe	aacgagcgccacccaactcactcatggt-NH2	511-30-01	FV-1 & FV-2	3' amine	2072
arrestor	gccatgagtgagttgtg	511-30-02		All 2'Ome + 3' amine arrestor for 511-30-01	2073
arrestor	gccatgagtgagttgtg	380-89-02		All 2-Ome Same as 380-82-02	2074
arrestor	gccatgagtgagttgtg	380-89-04		All 2-Ome Same as 380-82-04	2075
arrestor	gccatgagtgagttgtg	380-89-06		All 2-Ome Same as 380-82-06	2076
arrestor	gccatgagtgagttgtg	380-89-08		All 2-Ome Same as 380-82-08	2077
probe	aacgagcgccacccaactcactcatggt-NH2	511-67-01	FV-1 & FV-2	3' amine	2078
stacker	cttggacatgcctctctctggagc	781-79-01		stacker for 511-67-01 All 2'Ome	2079
arrestor	ccatgagtgagttgtg	781-79-02	FV-1 & FV-2	all 2'Ome arrestor for 511-67-01	2080
probe	aacgagcgccacccaactcactcatg-NH2	781-80-01		3' amine	2081
stacker	gcttggacatgcctctctctggag	781-80-02		stacker for 781-80-01 All 2'Ome	2082
arrestor	catgagtgagttgtg	781-80-03	FV-1 & FV-2	all 2'Ome arrestor for 781-80-01	2083
probe	aacgagcgccacccaactcactcat-NH2	781-81-01		3' amine	2084
stacker	ggcttggacatgcctctctctgga	781-81-02		stacker for 781-81-01 All 2'Ome	2085
stacker	ggcttggatagtcctctctctgga	938-74-01		stacker for 781-81-01 All 2'Ome to replace 781-81-02	2086
arrestor	atgagtgagttgtg	781-81-03		all 2'Ome arrestor for 781-81-01	2087
probe	cogtcacgcctcaactcactcat-NH2	938-46-02		same as 938-46-01 w/ 3' amine	2088
arrestor	atgagtgagttgtg	938-46-03		all 2'Ome arrestor for 938-46-01&02	2089
invader	taggtctatgtagtgatgaagatga	380-59-02			2090
invader	gtcatgtaggctctatgtagtgatgaagatga	511-32-01	MO4-1/MO4-2/MO4-3	longer invader 380-59-02	2091

## Mouse IL-4

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	aacgagcgccactctctctgtgacctg	511-14-01	FV-1 & FV-2		2092
arrestor	cgagggtcacagagagtg	511-14-02		All 2'Ome + 3' amine arrestor for 511-14-01	2093
probe	aacgagcgccactctctgtgacct-NH2	511-12-01	FV-1 & FV-2	458-34-01 with 3' amine	2094
arrestor	aggtcacagagagtg	511-02-01		All 2'Ome + 3' amine arrestor for 458-34-01	2095
probe	cagtcacgtctctctgtgacct-NH2	511-16-01	MO2	3' amine	2096
arrestor	aggtcacagagagagac	511-16-02		All 2'Ome + 3' amine arrestor for 511-16-01	2097
arrestor	aggtcacagagagagac	511-50-01		All 2'Ome + 3' amine arrestor for 511-16-01	2098
probe	aaccagtcgtactctctgtgacct	458-35-01	MISC-1		2099
arrestor	aggtcacagagagagac	511-03-01		All 2'Ome + 3' amine arrestor for 458-35-01	2100
probe	ccagtcgtactctctgtgacct	458-35-02	MISC-1		2101
arrestor	aggtcacagagagagac	511-04-01	MISC-2		2102
probe	aaccacccgactctctgtgacct	458-36-01	FV-1 & FV-2	All 2'Ome + 3' amine arrestor for 458-36-01	2103
probe	aacgagcgccactctctgtgacc	511-13-01			2104
arrestor	ggtcacagagagtg	511-13-02	FV-1 & FV-2		2105
probe	aacgagcgccactctctgtga-NH2	781-71-01		3' amine	2106
stacker	cctcggttcaaatgcgatgatcttc	781-71-02		All 2'Ome for 781-71-01	2107
arrestor	tcacagagagtgcc	781-71-03		All 2'Ome arrestor for 781-71-01	2108
Invader	atccatctcgtgcatggtggtcccta	380-32-01			2109
Invader	atccatctcgtgaatggtggtcccta	380-32-02		Same as 380-32-01 but underlined base is mismatch to sequence	2110
probe	aacgagcgccacccctctctgtgac-NH2	511-44-01	FV-1 & FV-2		2111
arrestor	gtcacagagagagtg	511-44-02		3' amine	2112
probe	aacgagcgccacccctctctgt-NH2	511-68-01	FV-1 & FV-2	All 2'Ome + 3' amine arrestor for 511-44-01	2113
arrestor	acaggaagagtg	511-68-02		3' amine	2114
invader	ggcacatccatctcgtgcatggtgga	511-45-01		All 2'Ome + 3' amine arrestor for 511-68-01	2115
probe	cogtcacgcctctctctgtgacct-NH2	511-46-01	MO4-1/MO4-2/MO4-3		2116

202209 "64243001"

arrestor	acgaggcacaggaggcg	511-46-02	All 2'-Ome + 3' amine arrestor for 511-46-01	2117
probe	cgcgcacgctctctctgacdc-NH2	511-69-01	3' amine	2118
arrestor	gaggtcacaggaggcg	511-69-02	All 2'-Ome + 3' amine arrestor for 511-69-01	2119
probe	cgcgcacgctctctctgac-NH2	781-68-01	3' amine	2120
stacker	tgggtcaaaatgccgatctctctca	781-68-02	All 2'Ome stacker for 781-68-01	2121
arrestor	ggtcacaggaggcg	781-68-03	3' amine	2122
probe	cgcgcacgctctctctgac-NH2	781-69-01	All 2'Ome stacker for 781-69-01	2123
stacker	ctgggttcaaaatgccgatctctctca	781-69-02	3' amine	2124
arrestor	gtcacaggaggaggcg	781-69-03	All 2'-Ome arrestor for 781-69-01	2125
invader	acatccatctcgtgcatggtgcctcta	511-47-01		2126
probe	cagtcacgtctctctctctct-NH2	511-17-01	3' amine	2127
arrestor	aggagaaggagagagcg	511-17-02	All 2'-Ome + 3' amine arrestor for 511-17-01	2128
invader	gcacatccatctcgtgcatgcgga	511-18-01		2129
probe	cgcgcagatcacctctgtgaco-NH2	781-83-01	3' amine	2130
arrestor	ggtcacaggagtgatc	781-83-02	All 2' Ome arrestor for 781-83-01	2131
probe	cgcgcacgctctctctgtgaco-NH2	781-82-01	3' amine	2132
invader	cgcgtcaltgcgttccttca	781-82-02		2133
arrestor	ggtcacaggaggaggcg	781-82-03	All 2' Ome arrestor for 781-82-01	2134
probe	cgcgcacgctctctctgtgaco-NH2	781-84-01	3' amine	2135
invader	cglgcaltgcgttccttcta	781-84-02		2136
arrestor	ggtcacaggaggaggcg	781-84-03	All 2' Ome arrestor for 781-84-01	2137

## Mouse IL-2

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgtctctctgttacacagttactct-NH2	511-19-01	MO2	3' amine	2138
arrestor	agagtaacgtgttaaaactaaagagcg	511-19-02		All 2'-Ome + 3' amine arrestor for 511-19-01	2139
invader	gcactcaaatgtgtgtcagagccca	511-20-01			2140

## Mouse IFN-γ

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	cagtcacgtctctctgttgcagttcc-NH2	511-24-01	MO2	3' amine	2141
arrestor	ggaactggcacaagagagagagcg	511-24-02		All 2'-Ome + 3' amine arrestor for 511-24-01	2142
probe	cagtcacgtctctctgttgcagttc-NH2	511-23-01	MO2	3' amine	2143
arrestor	gaactggcacaagagagagagcg	511-23-02		All 2'-Ome + 3' amine arrestor for 511-23-01	2144
probe	cagtcacgtctctctgttgcagtt-NH2	511-21-01	MO2	3' amine	2145
arrestor	aactggcacaagagagagagcg	511-21-02		All 2'-Ome + 3' amine arrestor for 511-20-01	2146
invader	gtctgcaggatttcatgtcaccaa	511-22-01			2147

## Human TNF-α

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	ccgcgcgagatcacctgtactgctg-NH2	511-77-01	TT-1/TT-2	3' amine (based on 685-27-01-1 base shorter)	2148
arrestor	caggcagtcagagtgatctcg	511-77-02		All 2'-Ome + 3' amine arrestor for 511-77-01	2149
probe	ccgcgcgagatcacctgtactgct-NH2	511-78-01	TT-1/TT-2	3' amine (based on 685-27-01-2 bases shorter)	2150
arrestor	aggcagtcagagtgatctcg	511-78-02		All 2'-Ome + 3' amine arrestor for 511-78-01	2151
invader	ctt gtc act cgg ggt tgg aga tga a	685-28-01			2152

## Human IL-1β

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments	
probe	gcgcgcacgcctctcatctgtttaggcc-NH2	511-79-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-21-01)	2153

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20220303 "66343001"  
All 2'-Ome + 3' amine arrestor for 511-79-01  
All 2'-Ome + 3' amine arrestor for 511-79-01

ggccctaaacagatgagagcgt  
ggccctaaacagatgagagcgtga  
caggctctggaaggagcacta

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## Human IL-6

Oligo Type	Sequence	Oligo Number	Secondary Cassette	Comments
probe	gcgcgcagccctctctctcattgaatcct-NH2	511-81-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	aggattcaatgaagagagagcgtga	511-82-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	aggattcaatgagagagagcgt	511-82-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	ccgtcaacgctctctctcattgaatcct-NH2	781-27-01	MO4-1/MO4-2/MO4-3	3' amine (511-81-01 with new arm)
arrestor	aggattcaatgagagagagcgt	781-27-02		All 2'-Ome + 3' amine arrestor for 781-27-01
probe	gcgcgcagccctctctcattgaatcc-NH2	511-83-01	MO4-1/MO4-2/MO4-3	3' amine (based on 685-16-01)
arrestor	ggattcaatgagagagagcgtga	511-84-01		All 2'-Ome + 3' amine arrestor for 511-81-01
arrestor	ggattcaatgagagagagcgt	511-84-02		All 2'-Ome + 3' amine arrestor for 511-81-01
probe	ccgtcaacgctctctcattgaatcc-NH2	781-28-01	MO4-1/MO4-2/MO4-3	3' amine (511-83-01 with new arm)
arrestor	ggattcaatgagagagagcgt	781-28-02		All 2'-Ome + 3' amine arrestor for 781-28-01
probe	ccgtcaacgctctctcattgaatc-NH2	781-29-01	MO4-1/MO4-2/MO4-3	3' amine (1 base shorter than 781-28-01)
arrestor	gattcaatgagagagagcgt	781-29-02		All 2'-Ome + 3' amine arrestor for 781-29-01
probe	ccgcgcagatcactctcattgaatc-NH2	781-30-01		3' amine (781-29-01 with new arm)
arrestor	gattcaatgagagagatgctc	781-30-02	TT-1/TT-2	3' amine (781-29-01 with new arm)
invader	cca aaa gtc cag tga ttt tca cca ggc aag a	685-18-01		All 2'-Ome + 3' amine arrestor for 781-30-01

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## Secondary Cassettes

SRT	cggaggaagcagttggtgcgcctcgttaaNH2	277-68-05	FV-1	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	ccaggaaagcaagtggtgcgcctcgttt	996-29-01	FV-2	
FRET probe	Fcaac(Z21)gctctcg	767-29-02		
SRT	cggaaagcagttgagagcgtgacggtNH2	641-60-03	MO4-1	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	cggaaagcagttgagagcgtgacggtNH2	562-93-01	MO4-2	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	ccaggaaagcaagtggtgcgcctcgttaaNH2	996-29-02	MO4-3	
FRET probe	Fcaac(Z21)gctctcg	767-29-02		
SRT	cggaggaagcagttggtgactcgcgcgtNH2	562-92-01	TT-1	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	cggaaagcagttggtgactcgcgcgtNH2	685-56-01	TT-2	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	gctactgagatgaagagacagtgaciglaNH2	491-68-02	MO2	
FRET probe	Fcttc(Cy3)ctcagtagc	491-68-01		
SRT	cgg agg aag cgg ttg cgt acg act ggt taa-NH2	458-35-03	MISC-1	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		
SRT	cgg agg aag cgg ttg gtt cgg gtt gtt gg-PO3	441-31-02	MISC-2	
FRET probe	Fcaac(Cy3)gctctcccg	187-46-01		

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Oligo sequence descriptions: 5' to 3' direction, 2'-Orn nt are bolded and underlined, internal modifications defined in ( )

FRET Oligo/SRT Combinations

	FRET Oligo	SRT		SEQ ID NO
Set 1	187-46-01	641-60-02		2192
Set 2	187-46-01	690-82-03		2193
Set 3	307-70-02	339-50-03		2194
Set 4	303-18-05	343-63-07		2195
Set 5	303-18-05	343-25-01		2196
Set 6	187-46-01	649-10-01		2197
Set 7	744-80-03	277-068-05N		2198
Set 8	187-46-01	833-18-07		2199
Set 9	767-28-03	777-71-10		
Set 10	767-29-02	996-29-01		
Set 11	1067-20-01	996-29-01		
Set 12	307-70-02	307-70-04		
Set 13	491-01-01	491-02-04		
Set 14	187-46-01	562-84-01		
FRET Oligos				
	Oligo #	Oligo Sequence		SEQ ID NO
	187-46-01	Fam-CAAC(CY3)GCTTCTCTCCG		2192
	307-70-02	Fam-ATT(CY3)TCTCAGAC-NH2		2193
	303-18-05	Fam-TAAC(CY3)GCTTCTCTCCG		2194
	744-80-03	Fam-CAA(Dabcyl)TGCTTCTCTCCG		2195
	767-28-03	Red Dye-CTC(Z-21)TCTCAGTGCG		2196
	767-29-02	Fam-CAC(Z-21)TGCTTCTCTGG		2197
	1067-20-01	Fam-CAC(Z-28)TGCTTCTCTGG		2198
	491-01-01	Fam-CTTC(CY3)TCTCAGAC		2199
SRT				
	Oligo #	Oligo Sequence		SEQ ID NO
	641-60-02	CGGAGGAAGCAGTTGGAGCGGTGACGGT-NH2		2200
	690-82-03	CGGAGGAAGCAGTTGTGGCGGTGACGGTT		2201
	339-50-03	CAGTCTGAGATGAATGAGACGAGAGAGT-NH2		2202
	343-63-07	CGGAGGAAGCGGTTAGTCTGTCACGTCAT-NH2		2203
	343-25-01	CGGAGGAAGCGGTTAGTCTGCCACGTCAT-NH2		2204
	649-10-01	CGGAAGAACGAGTTGGTGGCCTCGTAA-NH2		2205
	277-068-05N	CGGAGGAAGCAGTTGGTGGCCTCGTAA-NH2		2206
	833-18-07	CGGAGGAAGCAGTTGGTGGCCTCGGCT-NH2		2207
	777-71-10	CGGAGGAAGCAGTTGGTGGCCTCGGCT-NH2		2208
	996-29-01	CGGAGGAAGCAGTTGGTGGCCTCGGCT-NH2		2209
	307-70-04	CAGTCTGAGATGAATGATACGCGG-NH2		2210
	491-02-04	AGTCTGAGATGAAGGAGACGTGACTGIGG-NH2		2211
	562-84-01	CGGAGGAAGCGGTTGGTGATCTCGGG-NH2		2212

Oligo Type	Oligo #	Oligo Sequence	Notes	Position	SEQ ID NO
Human IL-2					
Probe	196-56-01	TCTGTGGCGTATCCTTCTTGGGCATGTAA		Splice Junction 2	2213
Probe	196-56-02	GTGGCGTATCCTTCTTGGGCATGTAA			2214
Probe	196-56-03	CGGTATCCTTCTTGGGCATGTAA			2215
Invader	128-93-02	GAGATGTTTCAGTTCTGTGG(ddC)	ddC = dideoxy C		2216
Capture Oligo	145-030-05	AAAAGATACGCCACAGAACACG(BIOTIN-da)TT			2217
Probe	315-28-01	TGGCGTATCTTAATTCATTTCAAAAT		Splice Junction 1	2218
Invader	315-28-02	TGGGAGTTTGGGATCTTTGTAATTA			2219

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Arrestor	425-87-05	<b>CTTCCAGGAGGAGACG</b>	2269
Secondary Cassette		Set 3	
Probe	425-87-03	CTCTCTCGTCTCTACCGAAATG	2270
Invader	425-81-02	GCTGTAGCCGTATTCAATTGTCAA	2271
Arrestor	425-87-06	<b>CATTTCCTGGTAGAGACG</b>	2272
Secondary Cassette		Set 3	
Probe	453-23-01	ATGACGTGACAGACCTCTGGAAGAT	2273
Probe	453-23-03	ATGACGTGACAGACCTCTGGAAGATG	2274
Invader	425-80-02	CATTGTAGTTAGTGGGTCTCGA	2275
Arrestor	453-23-04	<b>CACTTCCAGGAGGGTCTG-NH2</b>	2276
Secondary Cassette		Set 4	
Probe	453-23-02	ATGACGTGGCAGACCTCTGGAAGAT	2277
Invader	425-80-02	CATTGTAGTTAGTGGGTCTCGA	2278
Arrestor	453-23-05	<b>AICTTCCAGGAGGGTCTG-NH2</b>	2279
Secondary Cassette		Set 5	
Probe	435-67-04	CAGTACGTCCTCTCAGGTTTTG	2280
Invader	395-05-07	AGGCAGCTCTCAGGTGAGGTGTA	2281
FRET Probe - Secondary Reaction	524-51-01	FI-CTTC(Cy3)TCTCAGTAGCG	2282
Secondary Reaction Template	524-51-03	CGCTACTGAGATGAAGGAGACGTGACTGTA-NH2	2283
Secondary Reaction Template	524-51-04	CGCTAATGAGATGAAGGAGACGTGACTGTA-NH2	2284
Probe	435-67-04	CAGTACGTCCTCTCAGGTTTTG	2285
Invader	395-05-07	AGGCAGCTCTCAGGTGAGGTGTA	2286
FRET Probe - Secondary Reaction	524-51-02	FI-CTTC(Cy3)TCTCAGTAGCGA	2287
Secondary Reaction Template	524-51-05	TCGCTACTGAGATGAAGGAGACGTGACTGTA-NH2	2288
Secondary Reaction Template	524-51-06	TCGCTAATGAGATGAAGGAGACGTGACTGTA-NH2	2289
Human Ubiquitin			
Probe	796-72-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCG	2290
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2291
Arrestor	796-72-02	<b>GGATACGATAGAAAATGTAAAGGTCGCG</b>	2292
Secondary Cassette		Set 6	
Probe	796-72-03	AACGAGGCGCACCTTTACATTTTCTATCGTATCG	2293
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2294
Arrestor	796-72-04	<b>GATACGATAGAAAATGTAAAGGTCGCG</b>	2295
Secondary Cassette		Set 6	
Probe	820-35-01	AACGAGGCGCACCTTTACATTTTCTATCG	2296
Probe	820-35-02	AACGAGGCGCACCTTTACATTTTCTATCGT	2297
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2298
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAAGGTCGCG</b>	2299
Secondary Cassette		Set 7	
Probe	820-88-01	AACGAGGCGCACCTTTACATTTTCTATCGT-NH2	2300
Probe	820-88-02	AACGAGGCGCACCTTTACATTTTCTATCGT	2301
Probe	820-88-03	AACGAGGCGCACCTTTACATTTTCTATCGT	2302
Probe	820-88-04	AACGAGGCGCACCTTTACATTTTCTATCGT	2303
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2304
Arrestor	820-35-03	<b>ACGATAGAAAATGTAAAGGTCGCG</b>	2305
Secondary Cassette		Set 7	
Probe	847-65-01	GCCGCGCGCGCTTTACATTTTCTATCGT	2306
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2307
Arrestor	847-65-02	<b>ACGATAGAAAATGTAAAGGTCGCG</b>	2308
Arrestor	847-65-03	<b>ACGATAGAAAATGTAAAGGTCGCG</b>	2309
Secondary Cassette		Set 8	
Probe	936-61-01	AACGAGGCGCACCTTTACATTTTCTATCGTATCGG	2310
Invader	428-81-02	CCTTCCTTATCCTGGATCTTGGA	2311

Splice Junction 8

Splice Junction 4

Splice Junction 4

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Same as 820-35-02 with 3' Amine  
Same as 820-35-02 with O-Me U for Blocking  
Same as 820-35-02 with O-Me G for Blocking  
Same as 820-35-02 with T for Blocking. The T is a mismatch against the RNA sequence.

Same as 428-87-01 without Biotin blocking group

CGGATACGATAGAAAATGTAAGGTCGC  
Set 7  
Same as 428-87-03 without Biotin blocking group

Arrestor  
Secondary Cassette

Monocyte Chemolactic Protein 1 (MCP-1)

820-89-01  
885-76-01  
820-89-02  
Secondary Cassette

CCGTCACGCCCTCCTTCGGAGTTTGGG  
GGGTTGTGGAGTGAGTTCAAGTA  
CCCAAACCTCCGAAGAGGCG  
Set 9

Same as 720-92-01 without the amine

MAGE-3  
Probe  
Invader  
Stacker  
Stacker  
Probe  
Stacker  
Probe  
Invader  
Arrestor  
Secondary Cassette

1001-01-01  
871-18-03  
871-18-01  
1138-50-01  
1138-50-02  
1138-50-03  
1138-50-04  
1138-50-05  
1138-50-06  
Set 10  
AGCTCTCTGGGATC  
AACGAGGGCGACCTTGGGTGAGC  
GCTCTCTGGGATC  
AACGAGGGCGACCTTGGGTGAGCA  
CAGGTAGTTTCTGCAAGAAATGA  
TGCTCACCCAAAGTGGCG  
Set 11  
IGCAGGATCACAGC  
AACGAGGGCGCACCAATTCATAACA  
GGCCCTTGACCCCAA  
TGTTATGAATGGTGGTGGCG  
Set 11  
CAIGCAGGATCACAGC  
AACGAGGGCGCACCAATTCATAA  
AGGCCCTTGACCCCA  
TTAIGAAATGGTGGTGGCG  
Set 11

Same analyte specific Region as 871-18-02.

1138-51-01  
1138-51-02  
1138-51-03  
1138-51-04  
1138-51-05  
1138-51-06  
Secondary Cassette

1138-67-01  
1138-67-02  
1138-67-03  
1138-67-04  
1138-67-05  
1138-67-06  
1138-67-07  
1138-67-08  
Secondary Cassette

Human Oncostatin M  
Probe  
Invader  
Arrestor  
Arrestor  
Secondary Cassette

339-30-02  
264-42-03  
374-32-01  
374-32-02  
374-32-03  
524-39-01  
395-05-07  
435-40-02  
369-47-07  
Secondary Cassette

CCTGGCGTATCTAGGGCTCCA  
GTGTTACAGGTTTGGAGGCGGATAA  
CTTGGAGCCCTAGATAC-NH2  
CTTGGAGCCCTAGATAC-NH2  
CTTGGAGCCCTAGATAC-NH2  
Set 12  
CAGTCACGTCTCTTCAGGTTTG-NH2  
AGGCAGCTCTCAGGTGAGTGTA  
GAGCGGATATAGGGCTCCA  
CAAAACCTGAAGAGAG-NH2  
Set 13  
AACGAGGGCGACCCCTCTGTGTG  
CACACAGAGGGTGGCG  
AACGAGGGCGACCCCTCTGTGTG-NH2  
AACGAGGGCGACCCCTCTGTGTG-HEX  
GCAAGGACCCAGACTGAGCAGCGTA

Same as 435-67-04 with 3' Amine

1088-74-01  
1088-74-02  
1088-74-03  
1088-74-04  
603-75-03  
Secondary Cassette

HEX = Hexanediol

132/



Stacker	752-01-05	AGCAGTACCCCATG	2353
Arrestor	641-62-04	CACACAGAGGGAGCG-NH2	2354
Secondary Cassette		Set 10	
Probe	1138-49-02	AACGAGCGGCACCTTCTGGAG-NH2	2355
Stacker	1138-49-01	CTGGCCAAGGAG	2356
Invader	1138-49-03	GTCCTGCATGAGATCTGTCTGA	2357
Arrestor	1138-49-04	CTCCAGAAGGIGCG	2358
Secondary Cassette		Set 11	
Probe	1138-49-06	AACGAGCGGCACCTCTGCTTCT-NH2	2359
Stacker	1138-49-05	GGAGCTGGCCAA	2360
Invader	1138-49-07	TGGTGTCTGCATGAGATCTGA	2361
Arrestor	1138-49-08	TCAGAAAGCAGAGTGGCG	2362
Secondary Cassette		Set 11	
Probe	1138-49-10	AACGAGCGGCACCATGAGATCT-NH2	2363
Stacker	1138-49-09	GCTGCTTCTGGA	2364
Invader	1138-49-11	GAGTCTGCTGGTGTCCCTGA	2365
Arrestor	1138-49-12	AGAICTCATGTGTGGCG	2366
Secondary Cassette		Set 11	
Probe	1163-01-01	TGGCCAAAGGAGCA	2367
Stacker	1163-01-02	AACGAGCGGCACCTTCTGGAGC-NH2	2368
Invader	1163-01-03	TCCTGCATGAGATCTGTCTGCA	2369
Arrestor	1163-01-04	GCTCCAGAAGIGCG	2370
Secondary Cassette		Set 11	
Probe	1163-01-05	GGCCAAAGGAGCAC	2371
Stacker	1163-01-06	AACGAGCGGCACCTCTGGAGCT-NH2	2372
Invader	1163-01-07	CCTGCATGAGATCTGTCTGCTA	2373
Arrestor	1163-01-08	AGCTCCAGAGTGGCG	2374
Secondary Cassette		Set 11	
Probe	1163-01-09	GCCAAGGAGCAGG	2375
Stacker	1163-01-10	AACGAGCGGCACCTGGAGCTC-NH2	2376
Invader	1163-01-11	CCTGCATGAGATCTGTCTGCTTA	2377
Arrestor	1163-01-12	GAGCTCAGGTGGCG	2378
Secondary Cassette		Set 11	
84hr			
Probe	688-51-01	CGCCGAGATCACGCCAACGACGGTCT	2379
Invader	688-51-02	AGCCCTTGAGTTTAAACITTCATAGGCACTA	2380
Arrestor	688-51-03	AGACCGTCTGGCGTGATC	2381
Secondary Cassette		Set 14	
Probe	688-51-04	CGCCGAGATCACCTCAACACCATAAAAGCCA	2382
Invader	688-51-05	CGGGAGACTGAGGAATACGTCACCACCA	2383
Arrestor	688-51-06	TGGCTTTATGGTGTGAGGIGATC	2384
Secondary Cassette		Set 14	
MSH2			
Probe	690-32-02	CCGTACGCTCCGAACTGCCCTAG	2385
Invader	690-32-04	GTATAATAGTCCCGACGATCAAAGAGGC	2386
Stacker	709-52-01	GGTCTTGGGYAGGG	2387
Arrestor	690-32-05	GCGGAGGCTTGACGGGATC	2388
Secondary Cassette		Set 1	

bold indicates 2' O methyl base

# ELISA Format Kits

Leukocyte-associated molecule-1 alpha subunit, human (h-LFA1)

G4731 Probe Set

p

i

c

5'-CTCTCTCGTCTCCAGGGCGTCTCGTCCGG-PO4-3'  
5'-CTGTACACACAGTCGGTGCTGA-3'  
5'-AAAAAGGAGACGAGAGAGTG-3'

2389  
2390  
2391

for the remainder of the oligo sets on this list, the fret/target secondary sets are one of the following 11:

FRET/TARGET SETS	FRET	TARGET
set 1	307-70-03	502-93-01
set 2	307-70-03	502-93-02
set 3	187-46-01	641-60-02
set 4	187-46-01	277-68-05
set 5	187-46-01	685-56-01
set 6	187-46-01	641-60-03
set 7	187-46-01	649-10-01
set 8	680-17-02	782-70-02
set 9	187-46-01	277-68-06
set 10	187-46-01	491-02-02
set 11	307-70-03	761-40-02

## FRETS

307-70-03  
187-46-01  
680-17-02

5'-Fam-ATT(CY3)TCTCAGACT-NH2-3'  
5'-Fam-CAAC (CY3)GCTTCCTCCG-3'  
5'-Fam-CGCT (CY3)TCTCGCTCGC-3'

2392  
2393  
2394

## TARGETS

502-93-01  
502-93-02  
641-60-02  
277-68-05  
685-56-01  
641-60-03  
649-10-01  
782-70-02  
277-68-06  
491-02-02

5'-CAGTCTGAGATGAATGATACGAGAGAGT-NH2-3'  
5'-CAGTCTGAGATGAATGAGACGAGAGAGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGAGGCGTGACGGT-NH2-3'  
5'-CGGAGGAAGCAGTTGGTGGCCTCGTTAA-PO4-3'  
5'-GCGGAAGAAGCGGTTGGTGATCTCGGCGG-NH2-3'  
5'-CGGAAGAAGCAGTTGGAGGCGTGACGGT-NH2-3'  
5'-CGGAAGAAGCAGTTGGTGGCCTCGTTAA-NH2-3'  
5'-GCGAGAGAGACAGCGCAAACCTGCCGTTTC-3'  
5'-CGGAGGAAGCAGTTGTCCGCGAAGATG-3'  
5'-CGGAAGAAGCAGTTGGAGACGTGACTGTGG-NH2-3'

2395  
2396  
2397  
2398  
2399  
2400  
2401  
2402  
2403  
2404

20220303 "65340001"  
5'-GGAGTGAGACAGCGAAAGACTGCCGTTCT-3'

761-40-02

Cell Lysate Kits

adipocyte lipid binding protein, mouse (m-aP2)

C289 Probe Set

i  
p  
a  
a  
a  
p  
p  
a  
a  
p  
a  
a  
p  
p  
a  
a

FRET/TARGET SET 1

5'-CCGCCATCTAGGGTTATGATGCTA-3'  
5'-CTCTCTCGTCTCCTTACCTTCTCTGTCG-NH2-3'  
3'-PO4-AGCAGAGGAAGTGGAAAGGACAGC-5'  
3'-NH2-AGCAGAGGAAGTGGAAAGGACAGC-5'  
3'-PO4-AGAGCAGAGGAAGTGGAAAGGACAGC-5'  
5'-AACGAGGGCGCACCTTACCTTCTCTGTCG-NH2-3;  
5'-AACGAGGGCGCACCTTACCTTCTCTGTCG-Biotin-3'  
3'-PO4-CCGCGTGGAAAGTGGAAAGGACAGC-5'  
3'-PO4-CTCCGCGTGGAAAGTGGAAAGGACAGC-5'  
5'-CATCTTCGCGGACTTACCTTCTCTGTCG-NH2  
3'-PO4-GCCTGAAGTGGAAAGGACAGC-5'  
3'-PO4-GCGCCTGAAGTGGAAAGGACAGC-5'  
5'CTTGCTCCCGGTGCTTACCTTCTCTGTCG-NH2  
5'CTTGCTCCCGGTGCTTACCTTCTCTGTCG-Biotin  
3'-PO4-GGGCACGAAGTGGAAAGGACAGC-5'  
3'-PO4-AGGGGCACGAAGTGGAAAGGACAGC-5'

2406  
2407  
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2421

G392 Probe Set

p  
i

FRET/TARGET SET 1

5'-CTCTCTCGTCTCCACATTCCACCACAG-NH2-3'  
5'-TTGTGTAAGTCACGCCCTTTCATAAT-3'

2422  
2423

rev-ErbA, mouse (m-revErbA)

C155 Probe Set

p  
i

FRET/TARGET SET 4

5'-AACGAGGCGCACGAAGCAGGGTAATGAATCT-NH2-3'  
5'-CCACTCTCTGAAGGCTCCGCAGTC-3'

2424  
2425

Carnitine palmitolytransferase, mouse (m-CPT-1)

T352 Probe Set

p  
i

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAATGCCGTGTCGCC-NH2-3'  
5'-GCTTCAGGGTTTGTGCGAAGAAAGAAC-3'

2426  
2427

C851 Probe Set

p  
i

FRET/TARGET SET 2

5'-CTCTCTCGTCTCGTTTGCGGCGGATACAT-NH2-3'  
5'-CGGCTTGATCTCTTTCACGGGTCCAC-3'

2428  
2429

Carnitine palmitolytransferase, human (h-CPT-1)

135

[illegible]

Probe Set	Probe	Target	Probe	Target
U744 Probe set		FRET/TARGET SET 2		
p	5'-CTCTCTCGTCTCAAACTTCAAAATACCACTGTAATCT-NH2-3'			2433
i	5'-CTCACGTAATTTGTAGCCACCAGGAGTTTC-3'			2431
a	3'-NH2-GCAGAGTTGAAGTTTATGGTGACATTAGA-5'			2432
s	5'-TGGTCCAAAGACCCGACAGCAAAATCTTGAG-3'			2433
A456 Probe Set		FRET/TARGET SET 10		
p	5'-CAGTCACGTCTCTTCAGGGAGTAGCGCA-NH2-3'			2434
i	5'-CCCGTGGTAGGAGAGCAGCACTA-3'			2435
a	3'-NH2-GCAGAGAAATCCCTCATCGCGT-5'			2436
C759 Probe Set		FRET/TARGET SET 2		
p	5'-CTCTCTCGTCTCGCCACCAGGATT-NH2			2437
i	5'-CTCCACCAGTCGCTCACGTAAATTTGTAA-3'			2438
a	5'-AATCCTGTGGGCGAGACG-B-3'			2439
s	5'-TTAACTTCAAAATACCACTGTAATCTTGGTCCAAGACCG-3'			2440
G329 Probe Set		FRET/TARGET SET 4		
p	5'-ACCGAGGGCGCACCAATTATTCCTAACG-b-3'			2441
i	5'-GCCGTTTCCAGAGTCCGATTGATTTTGA-3'			2442
a	3'-(biotin)-GCGGTGGTTAATAAGGATTGC-5'			2443
C1763 Probe Set		FRET/TARGET SET 9		
p	5'-CATCTTCGCGGAGACATTTCTTGATGATTCCTT-3'			2444
i	5'-AAAAGGTGTCTGGGCTCGTGCT-3'			2445
a	3'-(biotin)-GCCTCTGTAAAGAACTACTAAGGAA-5'			2446
Phosphatidylinositol-3-phosphate p110 __, human (h-PI3Kp110_)				
G1045 Probe Set (FV Arm)		FRET/TARGET SET 4		
p	5'-AACGAGGCGCACCAAGTTTCTCTGTG-NH2-3'			2447
i	5'-GACCAAGCCCTGACATGAACCTTTTAC-3'			2448
a	3'-NH2-CGCGTGGTCAAAGGAGACAC-5'			2449
C1521 Probe Set		FRET/TARGET SET 2		
p	5'-CTCTCTCGTCTCGGGAGGGTAATAAAGG-NH2-3'			2450
i	5'-GCTGCCCTTTCAAATAATCTTATCGAAC-3'			2451
a	3'-NH2-AGCAGAGCCCTCCCATTTATTCC-5'			2452
C2667 Probe Set		FRET/TARGET SET 2		
p	5'-CTCTCTCGTCTCGTTGTATTTTAAGCCAG-NH2-3'			2453
i	5'-CGGTCCAGGTATCCCCAGAC-3'			2454

20220220" 6:24:30PM

3'NH2-AGCAGAGCAACATAAGAAATTCGGTC-5' 2455

FRET/TARGET SET 2

5'-CTCTCTCGTCTCCTCTGTGGATATGTTG-NH2-3' 2456  
5'-CTAAGTTTTTCAGGGATGGATGGTTCATGC-3' 2457  
3'NH2-AGCAGAGGAGACCACTATACAAAC-5' 2458

FRET/TARGET SET 2

5'-CTCTCTCGTCTCAACTGTGTGGC-NH2-3' 2459  
5'-TTAAGATCTGTAGTCTTTCCGAAC-3' 2460  
3'NH2-AGCAGAGTTCACACACCCCG-5' 2461

Cartilage-derived morphogenic protein 1, human (h-CDMP1)

FRET/TARGET SET 6

5'-CCGTCAAGCCTCCTGTTGCCTCCC-(biotin)-3' 2462  
5'-AGCCTCCAACCTTCACGCTGT-3' 2463  
5'-GGGAGGCAACAGGAGCGG-(biotin)-3' 2464

FRET/TARGET SET 5

5'-CCGCCGAGATCACTGAAGAGGATGCTGATGG-(biotin)-3' 2465  
5'-ACACCACGTTGTTGGCAGAGTCAAG-3' 2466  
5'-CCATCAGCATCCTCTTCAGTGATCTCGG-(biotin)-3' 2467

b-actin, rat (r-bACT)

C1671 Probe Set (longer)

FRET/TARGET SET 6  
5'-CCGTCAAGCCTCCTGTTGCCTTTAGGGTTCA-NH2-3' 2468  
5'-TCTGGGTCACTCTTTTCACGGTTGA-3' 2469  
3'-GCGGAGCGGAATCCCAAGT-5' 2470  
5'-GAGGGGCTCGGTGAGC-3' 2471

Bile Salt port Pump, rat (r-BSEP)

FRET/TARGET SET 5  
5'-CCGCCGAGATCAGGAGTCTTGCCTTTC-(biotin)-3' 2472  
5'-CCGCCGAGATCAGGAGTCTTGCCTTTC-NH3-3' 2473  
5'-TTCACACACGCTTTTCCTGGTATCTCC-3' 2474  
3'-(biotin)-CTAGTGCTCAAGAACGGAAAG-5' 2475

G1288 Probe Set

FRET/TARGET SET 2  
5'-CTCTCTCGTCTCCCAAGAGGCCAGT-(biotin)-3' 2476  
5'-TTCCTTCATCTAGGACAAGTGTGGAACCATAA-3' 2477  
5'-ACTGGCCTTCTGGGAGACG-(biotin)-3' 2478

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A790 Probe Set			
p	5'-CCGTCACGCCCTCTTTCCTCATTCTCCT-(biotin)-3'	2479	
i	5'-CCCAATTCCATTCTCATTATTCTCCGGAAGTAAATC-3'	2480	
a	5'-AGGAGAAATGAGGAAAGAGGCG-(biotin)-3'	2481	
Nitric Oxide Synthase 2A, human (h-iNOS2)			
A3418 Probe Set			
p	FRET/TARGET SET 6		
i	5'-CCGTCACGCCCTCTGTCTTTCTTCGC-(biotin)-3'	2482	
a	5'-GCTGCACCCGCCACCCC-3'	2483	
	5'-GCGAAGAAAGACAGAGGCG-(biotin)-3'	2484	
Neutral Carboxy Ester Hydrolase, human (h-NCEH)			
A1221 Probe Set			
p	FRET/TARGET SET 7		
p	5'-AACGAGGCGCACTCTTCTTATTCTCCTG-B-3'	2485	
i	5'-AACGAGGCGCACTCTTCTTATTCTCCTG-NH2-3'	2486	
s	5'-GTCTCAAAAGTCCACCACAGTCTC-3'	2487	
	5'-CAGGAGAAATAGAAAGAGTGGCG-(biotin)-3'	2488	
A1221 Probe Set			
p	FRET/TARGET SET 6		
p	5'-CCGTCACGCCCTCTCTTCTTATTCTCC-3'	2489	
i	5'-CCGTCACGCCCTCTCTTCTTATTCTCC-NH2-3'	2490	
a	5'-GTCTCAAAAGTCCACCACAGTCTC-3'	2491	
s	3'-GCGGAGAGAAAGATAAGAGG-5'	2492	
	5'-TGGGATGGGTCCTGGGC-3'	2493	
C1309. Probe Set			
p	FRET/TARGET SET 8		
i	5'-GAACGGCAGGTTTGGCACTCTTGGCATT-NH2-3'	2494	
a	5'-CAGGTAGGCGTAGGCTTGA-3'	2495	
s	3'-NH2-CGTCCAAACCGTGAGAACCGTAA-5'	2496	
	5'-GGCTCTGTGCTGGGCTA-NH2-3'	2497	
Peroxisomal Proliferation Activator Protein Receptor alpha, human (h-PPAR_)			
G1480 Probe Set			
p	FRET/TARGET SET 6		
i	5'-CCGTCACGCCCTCCCGACTCCGCTCT-(biotin)-3'	2498	
a	5'-CGGGTGCAGCGCAGCATT-3'	2499	
	5'-AGACGGAGTCGGAGGCG-(biotin)-3'	2500	
A1044 Probe Set			
p	FRET/TARGET SET 6		
i	5'-CCGTCACGCCCTCTGTCACTTGATCGTTCT-(biotin)-3'	2501	
a	5'-TGGCCTCATAAACTCCGTATTTTAGCAAG-3'	2502	
	5'-AGAACGATCAAGTGACAGAGGCG-(biotin)-3'	2503	

C 1311 Probe Set  
 p 2504  
 i 2505  
 a 2506

FRET/TARGET SET 6  
 5'-CCGCCGAGATCACGTGTCTACGTTTAGAAG-(biotin)-3'  
 5'-CACATGTACAATACCCTCCGCAATTTTCAATC-3'  
 5'-CTTCTAAACGTAGGACACGTCGATCTCGG-(biotin)-3'

Peroxisomal Proliferation Activator Protein Receptor beta, human (h-PPAR\_)

A595 Probe set  
 6B. Designed truncated probe and stackers to reduce temperature  
 p 2507  
 i 2508  
 a 2509  
 s 2510

FRET/TARGET SET 6  
 5'-CCGTCACGCCCTCTCTCTGAATCTTG-NH2-3'  
 5'-CTGGCACCTTGTGCGTTCTA-3'  
 3'-NH2-GCGGAGAGAAAGACTTAGAACG-5'  
 5'-AGCTGCGCTCACACTTCTCGT-3'

6C. Design for new INVADER assay with 50% 2'-Me.

FRET/TARGET SET 6  
 p 2511  
 i 2512  
 a 2513  
 s 2514

5'-CCGTCACGCCCTCTCTCTGAATCTTG-NH2-3'  
 5'-CTGGCACCTTGTGCGTTCTA-3'  
 3'-NH2-GCGGAGAGAAAGACTTAGAAC-5'  
 5'-CAGCTGCGCTCACACTTCTCGT-NH2-3'

6D. Truncate probe.

FRET/TARGET SET 6  
 p 2515  
 i 2516  
 s 2517

5'-CCGTCACGCCCTCTCTCTGAATCTT-NH2-3'  
 5'-CCTGGCACCTTGTGCGTTCTA-3'  
 5'-GCAGCTGCGCTCACACTTCTCGT-NH2-3'

C891 Probe Set

FRET/TARGET SET 7  
 p 2518  
 i 2519  
 a 2520  
 s 2521

5'-AACGAGCGCACGGTAGGCATTGTAGA-3'  
 5'-CCTTCCTTTTGGTCATGTTGAAGTTTTTCAC-3'  
 3'-CGCGTGCCATCCGTAACATCT-5'  
 5'-TGTGCTTGGAGAAAGGCCCTTCA-3'

Substance P, rat (r-SubP)

C344 Probe Set  
 p 2522  
 i 2523  
 a 2524  
 s

FRET/TARGET SET 6  
 5'-CCGTCACGCCCTCGCCACTTGTTTTCA-NH2-3'  
 5'-CCATGCCCATAAAGAGCGCTTTAACAGGA-3'  
 3'-NH2-GCGGAGCGGTGAACAAAAAGT-5'  
 NO STACKER

A396 Probe Set

FRET/TARGET SET 6  
 p 2525

5'-CCGTCACGCCCTCTTTATGCCCTTTTGTGA-NH2-3'

i	5'-TGCCCATTAGTCCAAACAAGGAATCTGTA-3'	2526
a	3'-GCGGAGAAATACGGAAAAACACT-5'	2527
s	5'-GAGATCTGACCATGCCCATAAAGAGCC-NH2-3'	2528
C752 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACGCTGGCAAAC TTGT-NH2-3'	2529
a	5'-CCTTTCTGTC TTGGAGACTTGCATCA-3'	2530
s	3'-NH2-CGCGTGGACCGTTTGAACA-5'	2531
	5'-ACAACTCCATCAACACTGTGCTTTGCTG-NH2-3'	2532
Hepatic Lipase, human (h-LIPC)		
A830 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACTCTAGGAAGTGGCA-NH2-3'	2533
a	5'-GTGCTGGGCAATATGTCTGTAGAGCG-3'	2534
s	3'-NH2-CGCGTGAGATCCTTCACCGT-5'	2535
	5'-GCCAGGCTGGAAGAGC-NH2-3'	2536
C1154 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACCGTCTCAGTTTGGT-NH2-3'	2537
a	5'-CGAGTAGTGACATGGTAAAAGTTGTTGTATTGGCT-3'	2538
	3'-NH2-CTCTAGTGGCAGAGTCAAAACCA-5'	2539
Hepatic Lipase, rat (r-LIPC)		
G357 Probe Set		
p	FRET/TARGET SET 5	
i	5'-CCGCCGAGATCACCGTTCACGGGT-NH2-3'	2540
a	5'-GGGAGATCCAGTCCACTAATCCA-3'	2541
s	3'-NH2-TCTAGTGTGCAAGTGCCCAA-5'	2542
	5'-GGGACTGTCGGGACTTCAGG-NH2-3'	2543
C1167 Probe Set		
p	FRET/TARGET SET 8	
i	5'-GAAACGGCAGGTTTGGGGAATTTCTTTATTCTT-NH2-3'	2544
a	5'-ATTCTTCGCCCCAGGGTGATG-3'	2545
s	3'-NH2-GTCCAAACCCCTTAAAGAAATAAAGAA-5'	2546
	5'-CTTTTGTCCCCAGCAGTGT-NH2-3'	2547
Metabotropic Glutamate Receptor 2, rat (r-mGluR2)		
C1403 Probe Set		
p	FRET/TARGET SET 7	
i	5'-AACGAGGCGCACGCTGGTGTGGGA-NH2-3'	2548
a	5'-GCCTCATAGCATCGCAGAGGTGT-3'	2549
s	3'-NH2-CGCGTGCCACCAACCCT-5'	2550
	5'-CAGAGGGCACGGTGTCATGTTGT-NH2-3'	2551



G-protein coupled receptor 2, rat (r-ETBR-LP2)

A1629 Probe set

p	5'-GAACGGCAGGTTTGTCTCAGCAGACCGC-NH2-3'	2552
i	5'-GAGAGGCCAAAGTGAGACCATGTGAAAGAAA-3'	2553
a	3'-NH2-CGTCCAAACAGTCGTCTGGCG-5'	2554
s	5'-CATGGATCGGCATGGCCCC-NH2-3'	2555

i kappa b alpha, human (h-MAD3)

C542 Probe Set

p	5'-AACGAGGGCGCACGGGTGTAGGGGGG-(biotin)-3'	2556
i	5'-GCCCTGCTCACAGGCAAT-3'	2557
a	5'-CCCCCTACACCGTGGCG-(biotin)-3'	2558

C363 Probe Set

P	5'-CCGTACCGCCTCGTCAGTGCCCTTTTC-(biotin)-3'	2559
i	5'-CACCTGGCGGATCACCTTCCATGT	2560
A	5'-GAAAAGGCACTGACGAGGCG-(biotin)-3'	2561

G953 Probe Set

P	5'-CCGTACCGCCTCCCTCATCCTCACT-(biotin)-3'	2562
i	5'-ACTCTGACTCTGTGTATAGCTCTT	2563
A	5'-AGTGAGGATGAGGAGGCG-(biotin)-3'	2564

C923 Probe Set

P	5'-AACGAGGGCGCACGGTTTCTAGTGTCANH2-3'	2565
i	5'-CTCACTCTCTGGCAGCATCTGAAT-3'	2566
A	3'-NH2-CGCGTGCCAAAAGATCACAGT-5'	2567
S	5'-GCTGGCCCCAGCTGC-NH2-3'	2568

Lecithin cholesterol acyltransferase, human (h-LCAT)

C821 Probe Set (truncated Probe Design)

p	5'-CCGCCGAGATCACGGTTATGCGCTG-NH2-3'	2569
i	5'-CCAGGGGGAGGTGGTC-3'	2570
a	3'-NH2-TCTAGTGCCAATACGCGACG-5'	2571
s	5'-CTCCTCTTTAGCTTGATGCTGG-NH2-3'	2572

C827 Probe Design

p	5'-GAACGGCAGGTTTGGGTGGTGTATGCG-NH2-3'	2573
i	5'-AGAGGGGAAACATCCAGGGGGAG-3'	2574
a	3'-NH2-CGTCCAAACCCACCACCAATACGCG-5'	2575

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C1217 Probe Design		
p	FRET/TARGET SET 5	2576
i	5'-CCGCCGAGATCACGAGATGCTGTATCCC-NH2-3'	2577
a	5'-GGTCAGGTTGCTGAAGACCATGTTG-3'	2578
	3'-NH2-TCTAGTGCTCTACGACATAGGG-5'	
Apolipoprotein A-1, human (h-ApoA1)		
A177 Probe Set	FRET/TARGET SET 6	2579
p	5'-CCGTCACGCCCTCTGAGCACATCCACG-NH2-3'	2580
i	5'-ACATAGTCTCTGCCGCTGTCTTA-3'	2581
a	3'-NH2-GCGGAGACTCGTGTAGGTGC-5'	2582
s	5'-TACACAGTGCCAGGTCCTT-NH2-3'	
A227 Probe Set (titrate length of 2'-O-Me in Invader)	FRET/TARGET SET 8	2583
p	5'-GAACGGCAGGTTTGTCCTCCAGCGG-NH2-3'	2584
i	5'-GTCAAGGAGCTTTAGGTTTAGCTGTTTA-3'	2585
i	5'-GTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2586
i	5'-GTCCCAGTTGTCAAGGATCTTTAGGTTTAGCTGTTTA-3'	2587
A	3'-NH2-GTCCAAACAGGGTCCGCC-5'	2588
s	5'-AGCCTTCAAACTGGGACACATAGTCTC-NH2-3'	
G350 Probe Set	FRET/TARGET SET 5	2589
p	5'-CCGCCGAGATCACCTTCTGTCTCCTT-NH2-3'	2590
i	5'-CTCCTGCCTCAGGCCG-3'	2591
a	3'-NH2-TCTAGTGGAGACAGAGGAA-5'	2592
s	5'-TTCCAGGTTATCCAGAACTCC-NH2-3'	
G233 Probe Set	FRET/TARGET SET 11	2593
p	5'-AGAACGGCAGTCTTTCTGTCTTCCCAAGG-NH2-3'	2594
i	5'-CCAGTTGTCAAGGAGCTTTAGGTTTAGT-3'	2595
a	3'-NH2-CGTCAGAAAGACAAAGGGTTCC-5'	2596
s	5'-CGGAGCCTTCAAACTGGGACACATAGT-NH2-3'	
Metabotropic Glutamate Receptor 1, rat (r-mGluR1)		
T934 Probe Set	FRET/TARGET SET 11	2597
p	5'-AGAACGGCAGTCTTTAGAAATAGCGCATCTGT-NH2-3'	2598
i	5'-CACTCAGGCTATGCTTGTGGCT-3'	2599
a	3'-NH2-GTCAGAATCTTATCCGCTAGACA-5'	2600
s	5'-GGGATGTCGAACAGCTGGAGAGATTCT-NH2-3'	
Ubiquitin, human (h-UBI)		

G119 Probe Set (MO4 Arm)

p 5'-CCGTCACGCCCTCTTACATTTTCTATCGTATCCG-(biotin)-3' 2601  
 l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2602  
 a 3'-(biotin)-GCGGAGGAAATGTAAAGATAGCATAGGC-5' 2603

G119 Probe Set

p 5'-CGCCGAGATCACCTTTACATTTTCTATCGTATCCG-(biotin)-3' 2604  
 l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2605  
 a 3'-(biotin)-CTAGTGGAATGTAAAGATAGCATAGGC-5' 2606

G131 Probe Set

p 5'-CATCTTCGCGGACTGGATCTTGGCC-(biotin)-3' 2607  
 l 5'-GCTGATCAGGAGGAATTCCTTCCCTTATCT-3' 2608  
 a 3'-(biotin)-GCCTGACCTAGAACCCGG-5' 2609

Scanned G119 region (ELISA format (No Arrestors))

p 5'-CTCTCTCGTCTTACATTTTCTATCGTATCCG-NH2-3' 2610  
 p 5'-CTCTCTCGTCTTACATTTTCTATCGTATCCG-NH2-3' 2611  
 p 5'-CTCTCTCGTCTCTCTTACATTTTCTATCGTATCCG-NH2-3' 2612  
 p 5'-CTCTCTCGTCTCTCTTACATTTTCTATCGTATC-NH2-3' 2613  
 p 5'-CTCTCTCGTCTCGCTTACATTTTCTATCG-NH2-3' 2614  
 l 5'-GGAAATTCCTTATCCTGATCTTGA-3' 2615  
 l 5'-GGAAATTCCTTATCCTGATCTTGGC-3' 2616  
 l 5'-CCTTCCTTATCCTGGATCTTGGCA-3' 2617  
 l 5'-TTCTTATCCTGGATCTTGGCCA-3' 2618  
 l 5'-TCCTTATCCTGGATCTTGGCCTA-3' 2619

Ubiquitin, mouse (m-UBI)

G294 Probe Set

p 5'-CCGTCACGCCCTCTCTGGATGTTGTA-(biotin)-3' 2620  
 l 5'-CCAGGTGCAGGTTGACTA-3' 2621  
 a 3'-(biotin)-GCGGAGGGAAGACCTACAACAT-5' 2622

G294 Probe Set

p 5'-CGCCGAGATCACCTTCTGGATGTTGTA-(biotin)-3' 2623  
 l 5'-CCAGGTGCAGGTTGACTA-3' 2624  
 a 3'-(biotin)-CTAGTGGAAGACCTACAACAT-5' 2625

G294 Probe Set

p 5'-CCGTCACGCCCTCTCTGGATGTTGTAAT-NH2-3' 2626  
 l 5'-CCAGGTGCAGGTTGACTA-3' 2627



**FIGURE 48**

12		
1	8	C
2	5	U
3	5	U
4	2	U
5	1	U
6	2	C
7	7	G
8	7	A
9	1	U
10	1	C

1004039 . 022002  
2002200 6604001

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FIGURE 49

Assays	SRT #	Oligo Type	Secondary system	Oligo Sequence (5' to 3')	SEQ ID NO:
human v-FOS	2	Probe	FRET probe	FL-CAC-Z28-TGC TTC GTG G	2868
		Invader	Secondary Reaction Template 1	CCA GGA AGC AAG TGG TGC GCC TCG tt	2869
		Stacker	Secondary Reaction Template 2	CCA GGA AGC AAG TGG AGG CGT GAC ggt	2870
		Arrestor	Secondary Reaction Template 3	CCA GGA AGC AAG TGA CGC AGC GAC ggt	2871
human v-FOS	2	Probe		CCGTCACGCGCTCGTCATCAGGGAT NH2	2872
		Invader		CTCTTCTGGGAAGCCCCAGA	2873
		Stacker		ctgacaggcaggt	2874
		Arrestor		atccctgatgacgagggc	2875
human v-FOS	2	Probe		CCGTCACGCGCTCCAGCAGGTTG NH2	2876
		Invader		ACTCTAGTTTTTCTTCTCCTTA	2877
		Stacker		gcaatctcggtctgc	2878
		Arrestor		ccaagggtctgagggc	2879
human v-FOS	2	Probe		CCGTCACGCGCTCAGAGGCAGGG NH2	2880
		Invader		GGCTCAGGGTCATTGAGGC	2881
		Stacker		tgaaggcctc	2882
		Arrestor		cctgcctctgagggc	2883
mouse interferon gamma	2	Probe		CCG TCA CGC CTC CCT TTT GCC AGT TG NH2	2884
		Invader		GCT CTG CAG GAT TTT CAT GTC ACC ATA	2885
		Stacker		ctc cag ata tcc aag aag ag	2886
		Arrestor		gaa ctg gca aaa ggg agg cg	2887
mouse interferon gamma	1	Probe		AAC GAG GCG CAC CCTTTTGCCAGTTG NH2	2888
		Arrestor		gaactggcaaaagggtgcg	2889

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mouse interleukin 2	1	Probe Stacker Arrestor	AACGAGCGCACCCCTTAGTTTACA NH2 acagttactctgatattgctg ttg taa aac taa agg cgt gcg	2919 2920 2921
mouse interleukin 2	2	Probe Stacker Arrestor	CCG TCA CGC CTC CCC TTT AGT TTT ACA A NH2 cagttactctgatattgctg tgt aaa act aaa ggg gag gc	2922 2923 2924
mouse interleukin 2	2	Stacker	acagttactctgatattgctg	2925
mouse interleukin 4	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CTC CTG TGA CC NH2 ACA TCC ATC TCC GTG CAT GGC GTC CCT TA tcg gtt caa aat gcc gat gat ctc tct ca ggt cac agg agg cgg cg	2926 2927 2928 2929
mouse interleukin 4	2	Probe Stacker	CCG TCA CGC CTC CTC CTG TGA CC NH2 tcg gtt caa aat gcc gat ga	2930 2931
mouse interleukin 4	2	Probe	CCG TCA CGC CTC CTC CTG TGA CA NH2	2932
mouse interleukin 4	2	Probe Stacker	CCG TCA CGC CTC CTC CTG TGA C NH2 ctc ggt tca aaa tgc cga tga	2933 2934
mouse interleukin 4	2	Probe	CCG TCA CGC CTC CTC CTG TGA CT NH2	2935
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC TCT TTT CTC ATT T NH2 GTT CAT ACA ATC AGA ATT GCC ATT GCA CAA CA cca cga tt ccc aga gaa c aaa tga gaa aag aga ggc	2936 2937 2938 2939
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCAGGGAAGGCC NH2 TCCTCTCCGGACTTGTGAAGTC gtggtgtcaccagcat ggcctccctgagcc	2940 2941 2942 2943
mouse interleukin 6	2	Probe Invader Stacker Arrestor	CCGTACAGCCCTCAGTGGTATCCT NH2 GGTATAGACAGGCTCTGTGGGC ctggaagtcctc aggataccacigaggc	2944 2945 2946 2947



mouse SRB1	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC GGT TCT CCA C NH2 CAG GCT GGA AAT GGA GGC TGC A gaa gga cac ggt gtc gtt gtc a gtg gag aac cga ggc g	2948 2949 2950 2951
rat CX3C	2	Probe Invader Stacker Arrestor	CCG TCA CGC CTC CTG TAC ACG AGA G NH2 GGT GGT GAT GGT GAT GGC TA aga gag acc ggg ata gat agc ctc tcg tgt aca gga ggc	2952 2953 2954 2955
rat CX3CR1	1	Probe Invader Stacker Arrestor	AAC GAG GCG CAC CCA CCA AGA GG NH2 AGG CGT CCA GAA GAG GAA GAC AAC AAA atg agc cta atg gct c cct ctt ggt ggg tgc gc	2956 2957 2958 2959
rat CX3CR1	1	Stacker	atgagcctaattggtcttggc	2960
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGCTTGACTACTAACA NH2 GGCTGTGCACCGCGTTTC cattccagctcgt tgttagtagtcaagcgtcgc	2961 2962 2963 2964
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGTTCCATCTTC NH2 CTGTGAAGGGGTACTGGTCAC tcctgcgactctc gaagatggaacgtgcgc	2965 2966 2967 2968
rat Homer 1C	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCCCTCTGTT NH2 TCCTGTAGTTTCTGAGTCAAAGAGTA cttgaagttctctggcg aacagaggggtgcgc	2969 2970 2971 2972
rat Homer 1C	2	Probe Arrestor	CCGTCACGCCCTCCCCCTCTGTTC NH2 gaacagaggggagggcg	2973 2974
mouse tumor necrosis factor (a)	2	Probe Invader Stacker Arrestor	CCGTCACGCCCTCAGATGATCTGAGT NH2 ACAGGCTTGTCACCTCGAATTTTGAGAC gtgaggggtctggg actcagatcatctgagggcg	2975 2976 2977 2978

mouse tumor necrosis factor (a)	1	Probe Arrestor	AACGAGGCGCACTGATGATCTGAGT NH2 atcagatcatctgtgcgc	2979 2980
mouse tumor necrosis factor (a)	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCTGGAACTTCTC NH2 ACTGATGAGAGGGAGGCCATTA atcccttggggac gagaagttcccagaggcg	2981 2982 2983 2984
mouse tumor necrosis factor (a)	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCTGAGTAGTT NH2 TGTCACAGCATCTTGTGTTTA gtgaaagctctgagcac aactactcaggaggcg	2985 2986 2987 2988
human v-JUN	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTCTGGCAAG NH2 GGGCCGCAACAGGGA cggggacacccg ctttgccagagggtgcgc	2989 2990 2991 2992
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCCATGCTCTGTTT NH2 GGCCAGGTTTCAGGGTA caggatctggggta aaacagagcatggagggc	2993 2994 2995 2996
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCAGTTGCTGAGG NH2 CAGCGCGCCTGGGTTGAC tttgcgtagacggg cctcagcaactgagggc	2997 2998 2999 3000
human v-JUN	2	Probe Stacker Arrestor	CCGTACAGCCTCCATGCTCTGTTT NH2 aggatctggggttact gaaacagagcatggagggc	3001 3002 3003
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCCGTAGACCGC NH2 CTGGGTTGAAGTTGCTGAGGTTTGA ggctcgtgtgcagg gccggtctacggagggc	3004 3005 3006 3007
human v-JUN	1	Probe Invader Stacker Arrestor	AAC GAG GCG CAC TAA GAG CGC A NH2 GCCTTTGACAGGGAAAGTTTCTCA cgcacccgctgg tgcgctcttagtgcgc	3008 3009 3010 3011

human v-JUN	1	Probe Invader Stacker Arrestor	AACGAGGCGCACTCGGACGG NH2 GTAGCCATAAGGTCCGCTCA gaggaaacgagcggtga ccgtccgagtgccg	3012 3013 3014 3015
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCCTCGGACGG NH2 GTTACTGTAGCCATAAGGTCCGCTA tggttcgagcggtga ccgtccgagggagc	3016 3017 3018 3019
human v-JUN	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCAAGGTCCGCT NH2 GATCTTGGGGTTACTGTAGCCATC ctcggacgggaggaac agcggaccttgagg	3020 3021 3022 3023
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGCTGTGAG NH2 CAGGACTTGGGCGGAGCTGA aggtaggggaagac ctcaacgacaggtgccc	3024 3025 3026 3027
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCCGGCAAGG NH2 TGCTATGGGCAAGTTTCGTGGATGA ttgaggacgctg ccctfgcggaggc	3028 3029 3030 3031
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCCGGGTGTGTA NH2 GAGAGTCGCGTCCTTGCTA agttccagtgcaagt tacaacacccggaggc	3032 3033 3034 3035
human v-MYC	2	Probe Invader Stacker Arrestor	CCGTACAGCCTCTTGTGCTGATGT NH2 GAGGGAGGCGCTGCGTAGA gtggagacgtggcac acatcagcacagaggc	3036 3037 3038 3039
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACTCGGAGGTCA NH2 GGCTGCACCGAGTCGTAGA tagttcctgttggaag tgacctcgagtgccc	3040 3041 3042 3043

human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATGCGGCA NH2 TGCTATGGGCAAGTTTCGTGGC agggtgcggaccg tgccgcattgcgc	3044 3045 3046 3047
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGCTGGTG NH2 TGTTCTCTCCTCAGAGTCGA gtggcgggtgtct caccagcagggtgcgc	3048 3049 3050 3051
human v-MYC	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGTGGGC NH2 CGTGGCACCTCTTGAGGAA tgtgaggagggttgct ccactgggtgcgc	3052 3053 3054 3055

Secondary system:		Oligo Sequence (5' to 3')		SEQ ID NO:
FRET probe	Secondary Reaction Template	RR-CTC-Z28-TTC TCA GTG CG	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	
Analyte Human GAPDH	Oligo Type	Oligo Sequence (5' to 3')		SEQ ID NO:
	Probe	5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'		3058
	Invader	5'-gga atc ata ttG GAA CAT GTA AAC CAT C-3'		3059
	Arrestor	5'-ctt cat tga cct caa cta cgt gat ct-3'		3060
Mouse/Rat GAPDH	Probe	5'-CCG CCG AGA TCA CGT AGT TGA GGT CAA TGA AG-NH2-3'		3058
	Invader	aga atc ata ctG GAA CAT GTA GAC CAT C		3061
	Invader	gga gtc ata ctG GAA CAT GTA GAC CAT C		3062
	Arrestor	5'-ctt cat tga cct caa cta cgt gat ct-3'		3060
mFabp4	Probe	CCGCCGAGATCACCCATCCCACT NH2		3063
	Invader	CATCTCGTTTTCTCTTTATTGTCGACTTTTA		3064
	Stacker	tctgcacctgcacc		3065
	Arrestor	gtgggatgggtgac		3066
mFabp4	Probe	CCGCCGAGATCACCCATCCCACT NH2		3067
	Invader	cgttttctcTTTATTGTCGACTTTTA		3068
	Stacker	ttctgcacctgcac		3069
mFabp4	Probe	CCGCCGAGATCACCTTCTGCACC NH2		3070
	Invader	CTTTATTGTCGACTTTCCATCCCAA		3071
	Stacker	tgcaccagggcc		3072
	Arrestor	ggtgcagaaggtgac		3073

mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACCAAGGGC NH2 CCATCCCACTTCTGCACCTGA ccgccatctagg ccctgggtggtgac	3074 3075 3076 3077
mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACCAATCCACG NH2 TCCTGTCTCTGCGGTGATTTTATA cccagttgaaggaatct cgtggaattcgtgac	3078 3079 3080 3081
mFabp4	Probe Arrestor	CCGCCGAGATCACCAATCCACG NH2 ccagttgaaggaatctcg	3082 3083
mFabp4	Probe Invader Stacker Arrestor	CCGCCGAGATCACCAATCCACG NH2 CTTCTGTCTCTGCGGTGATTTA cccagttgaaggaatct gtggaattcgtggtgac	3084 3085 3086 3087
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACCAACTTCCGCG-NH2 GCAAGAGCGAGAACCTGGA cggaagttcgggtgac	3088 3089 3090
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACCAAGAGCGAGAAC-NH2 GGCGGTTAGAGCAGACGCGC ggtctcgtcttgcgtgac	3091 3092 3093
rRPS29	Probe Invader Arrestor	CCGCCGAGATCACGCTATGTCCTTC-NH2 TCAGGTCGCTTAGTCCAACTTAATGAAC gaaggacataggcgtgac	3094 3095 3096

rRPS29	Probe Invader Arrestor	CCGCCGAGATCACGTCGCTTAGTCC-NH2 GGTAGACAGTCGAATCATCCATTCAGC ggactaagcgacgtgac	3097 3098 3099
rat RPS29	Probe Invader Stacker Arrestor	5'-CCGCCGAGATCACGCCCTATGTCCTT NH2-3' 5'-AGGTCGCTTAGTCCAACTTAATGAAC-3' 5'-cgctactgacggaagcacgtgc-3' 5'-aaggacataggcggtgac-3'	3100 3101 3102 3103
human RPL5	Probe Invader Stacker Arrestor	5'-CCGCCGAGATCACGCTCCGATGTACT NH2-3' 5'-GCATGTAATCTGCAACATCTGGCCCATGATGTA-3' 5'-TCTGCATTAAATTCCTTGCTTTCAGAATCATAACCAGGG-3' 5'-agtacatcggaagcggtgac-3'	3104 3105 3106 3107
human RPL5	Probe Invader Stacker Arrestor	5'-CCGCCGAGATCACGCTCCGA NH2-3' 5'-GCAACATCTGGCCCATGATGT-3' 5'-tgtactctgcataaattcct-3' 5'-tcggaagcggtgac-3'	3108 3109 3110 3111
hACT	Probe Invader Arrestor	CCGCCGAGATCACTGGGTCATCTTCT-NH2 GGGTGTTGAAGGTCTCAAACATGATCA agaagatgacccagtgac	3112 3113 3114
hACT	Probe Invader Arrestor	CCGCCGAGATCACAGCAGCCGTGG-NH2 CCAGGGAGGAGCTGGAC ccacggctgctgac	3115 3116 3117
r/m ACT	Probe Invader Arrestor	CCGCCGAGATCACTGGGTCATCTTTT-NH2 GGGTGTTGAAGGTCTCAAACATGATCA aaaagatgacccagtgac	3118 3119 3120

r/m ACT	Probe Invader Stacker Arrestor	CCGCCGAGATCACTGGGTCATC-NH2 GGGTGTTGAAGGTCTCAAACATGATCA ttttcacggttgcc gatgaccacagtgatc	3121 3122 3123 3124
hHPRT	Probe Invader Stacker Arrestor	CCGCCGAGATCACATAGCTCTTCA-NH2 CCCCTGTTGACTGGTCATTACAC gtctgataaaatctacagtcattagg tgaagagctatgtgatc	3125 3126 3127 3128
hHPRT	Probe Invader Stacker Arrestor	CCGCCGAGATCACACTTTGAACAAGTTGG-NH2 GGGAACCTGCTGACAAAGATTCACTGGTAATAAA aaaatacagtcacattactgaaacactact ccaactgttcaaagtgatc	3129 3130 3131 3132
hPGK	Probe Invader Stacker Arrestor	CCGCCGAGATCACCTGGTGT-TT-NH2 GGACAGCAGCCCTTAATCCTA gttatcgggtgtcttca aaacaaccagggtgatc	3133 3134 3135 3136
hPGK	Probe Invader Stacker Arrestor	CCGCCGAGATCACACCGACTT-NH2 CCTAGGTGGCTCATAAGGACTC ggctccattgtcca aagtcgggtgtgatc	3137 3138 3139 3140



hPGK	Probe	CCGCCGAGATCACCCCATCCA-NH2	3141
	Invader	CTTTCAGGACACAGTCCAAGA	3142
	Stacker	gccagcaggatgc	3143
	Arrestor	tgatggggatgc	3144
hRPL19	Probe	CCGCCGAGATCACCTTCCTTGG-NH2	3145
	Invader	CTCTTCACGGCGCTTGCGTGA	3146
	Stacker	tccttagacctgcgagcc	3147
	Arrestor	ccaaggaaggatgc	3148
r/m RPL19	Invader	CTCCCGGGCGCTTTCGTGA	3149
	Stacker	tccttagacctgcgagcc	3150
hRPL19	Probe	CCGCCGAGATCACTGCTTCCTTG-NH2	3151
	Invader	GCTCTTCACGGCGCTTGCGGA	3152
	Stacker	gtcttagacctgcgagcc	3153
	Arrestor	caaggaagcagtgatc	3154
r/m RPL19	Invader	CCTCCCGGGCGCTTTCGA	3155

Analyte	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO:
Human GAPDH	Probe	CCGCCGAGATCACGATGATCTTGAGGCT-NH <sub>2</sub>	182
	Invader	TGGTGCAGGAGGCATTGCTC	183
	Arrestor	agcccaagatcatcgatct	3156
	FRET probe	Cy5-CTC-(Z28)-TTCTCAGTGCG	3157
	SRT	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	173
	FRET probe	Cy5-CAC-(Z28)-TGCTTCGTGG	3158
	SRT	CCAGGAAGCAAGTGGTGATCTCGGCggt	3159
Human Ubiquitin	Probe	CGCCGAGATCACCTTTACATTTTCTATCGT-NH <sub>2</sub>	169
	Invader	CTTCCTTATCCTGGATCTTGGCA	170
	Arrestor	acgatagaaaatgtaaaggatgc	171
	FRET probe (Epoch yellow dye)	Z38-CTC-(Z28)-TTCTCAGTGCG	3160
	FRET probe (Epoch yellow dye)	550-CTC-(Z28)-TTCTCAGTGCG	3161
	SRT	CGC AGT GAG AAT GAG GTG ATC TCG GCg gt	173
Human CYP 3A7	Probe	5'-AAC GAG GCG CAC GTC ATA AAT ACC CC-NH2-3'	662
	Invader	5'-GCC AGC ATA GGC TGT TGA CAC-3'	663
	Stacker	agactttctatcttttataacattc	664
	Arrestor	ggggtatttatgacgigcgc	665
	FRET probe	F-TCC-(Z28)-ACTCCGAGCT	3162
	FRET probe	RR-TCC-(Z28)-ACTCCGAGCT	3163
	SRT	AGC TCG GAG TAG GAG TGC GCC TCG tt	3164
	SRT	AGC ACG GAG TAG GAG TGC GCC TCG tt	3165
	SRT	AGC CCG GAG TAG GAG TGC GCC TCG tt	3166
	SRT	AGC GCG GAG TAG GAG TGC GCC TCG tt	3167
	FRET probe	FL-CAC-Z28-TGC TTC GTG G	189
	SRT (Epoch)	AGC GCG GAG TAG GAG TGC GCC TCG TTT	3168
	SRT (Epoch)	CC(A30) GGA AGC AAG TGG TGC GCC TCG TTT-Hex	3169
	SRT (Epoch)	CC(A30) GGA AGC AAG TGG TGC GCC TCG T(U33)T-Hex	3170
	SRT (Epoch)	CC(A30) GG(A30) AGC AAG TGG TGC GCC TCG T(U33)T-Hex	3171
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC AAG TGG TGC GCC TCG T(U33)T-Hex	3172
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC (A30)AG TGG TGC GCC TCG T(U33)T-Hex	3173
	SRT (Epoch)	CC(A30) GG(A30) (A30)GC (A30)(A30)G TGG TGC GCC TCG T(U33)T-Hex	3174



rat CYP2B2	2	Probe Probe Invader Stacker Stacker Arrestor Arrestor Arrestor	5'-CCG TCA CGC CTC AGA GCC AAT CAC-NH2-3' 5'-CCG TCA CGC CTC AGA GCC AAT CAC-HEX-3' 5'-CGA TCA TCA AGG GAT GGT GGC CTG TGC-3' 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G-3' 5'-CTG ATC AAT CTC CTT TTG GAC TTT CTC TGC G HEX-3' 5'-gtgattggctctgaggcg -3' 5'-gtgattggctctgaggcg HEX-3' 5'-gtgattggctctgaggcg -3'	679 3187 680 681 3188 682 3189 3190
human CYP2B6	2	Probe Probe Invader Stacker Stacker Arrestor Arrestor Arrestor	5'- CCG TCA CGC CTC CAC CAT ATC CC-NH2-3' 5'- CCG TCA CGC CTC CAC CAT ATC CC-HEX-3' 5'-CCA GCG GTT TCC ATT GGC AAA GAT CAA-3' 5'-cggaagaatgggtcgaccatg-3' 5'-cggaagaatgggtcgaccatg HEX-3' 5'-gggatatggtggaggcg-3' 5'-gggatatggtggaggcg HEX-3' 5'-gggatatggtggaggcg -3'	638 3191 639 640 3192 641 3193 3194
rat CYP4A3	1	Probe Invader Stacker Stacker Arrestor Arrestor	5'-AAC GAG GCG CAC TTG ACA GAG TCC-NH2-3' 5'-GCT TCT CCC ATT TGT CTA GCA TTA TAA-3' 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG-3' 5'-GCC ATG ATT TTG ACA TAG GGT TTG AGG ATG HEX-3' 5'-ggactctgtcaagtgcgc-3' 5'-ggactctgtcaagtgcgc HEX-3'	1454 1459 1460 3195 1458 3196

human NR112	1	Probe	5'- AACGAGGGCGCACGCAACTCGCA NH2-3'	3197
			5'- AACGAGGGCGCACGCAACTCGCA HEX-3'	3198
			5'- AACGAGGGCGCACGCAACTCGCA 3-morpholino 1,2-propanediol-3'	3199
			5'- AACGAGGGCGCACGCAACTCGCA 1,2-octanediol-3'	3200
			5'- AACGAGGGCGCACGCAACTCGCA methoxyphenyl-3'	3201
			5'- AACGAGGGCGCACGCAACTCGCA amine(C3)-3'	3202
			5'- AACGAGGGCGCACGCAACTCGCA amine(C6)-3'	3203
			5'- GGCCTGCAGAGACTCTGC -3'	3204
			5'- gccactgtaagcac -3'	3205
			5'- tgcgagtgctgcgc -3'	3206
			5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
human ABCC2	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
			5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
			5'- gcc aaa tct cct cca -3'	3215
			5'- tga gat tgg agg tgc gc -3'	3216
			5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
			5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
			5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
			5'- gcc aaa tct cct cca -3'	3215
			5'- tga gat tgg agg tgc gc -3'	3216
human NR112	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3197
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3198
			5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3199
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2-octanediol-3'	3200
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3201
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3202
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3203
			5'- GGCCTGCAGAGACTCTGC -3'	3204
			5'- gccactgtaagcac -3'	3205
			5'- tgcgagtgctgcgc -3'	3206
			5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
			5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
			5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
			5'- gcc aaa tct cct cca -3'	3215
			5'- tga gat tgg agg tgc gc -3'	3216
human ABCC2	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
			5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
			5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
			5'- gcc aaa tct cct cca -3'	3215
			5'- tga gat tgg agg tgc gc -3'	3216
			5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3207
			5'- AAC GAG GCG CAC CTC CAA TCT CA HEX-3'	3208
			5'- AAC GAG GCG CAC CTC CAA TCT CA 3-morpholino 1,2-propanediol-3'	3209
			5'- AAC GAG GCG CAC CTC CAA TCT CA 1,2 octanediol-3'	3210
			5'- AAC GAG GCG CAC CTC CAA TCT CA methoxyphenyl-3'	3211
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C3)-3'	3212
			5'- AAC GAG GCG CAC CTC CAA TCT CA amine(C6)-3'	3213
			5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3214
			5'- gcc aaa tct cct cca -3'	3215
			5'- tga gat tgg agg tgc gc -3'	3216

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3217
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3218
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3219
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3220
Assay	SRT #	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO
Human CYP 2B6	1	Probe	AACGAGGCGCACCCACCATATCC-NH <sub>2</sub>	3221
		Invader	CCAGCGGTTTCCATTGGCAAAGATCAA	639
		Stacker	ccggaagaatgggtcgaccatg	3222
		Arrestor	ggatatgtgtggtgcgc	3223
		Stacker	ccggaagaatgggtcgac	3224
Human CYP 2B6 e6	2	Probe	CCGTCACGCCTCGGTTGAGGTTT-NH <sub>2</sub>	3225
		Invader	CAGCAAAAGAAGAGCGAGAGCGTGTGAC	1911
		Stacker	tggggcgtgaattcactgtg	3226
		Arrestor	gaaccicaaccgagggcg	3227
	2	Stacker	tggggcgtgaattcact	3228
		Probe	CCGTCACGCCTCGGTTGAGGTTT-NH <sub>2</sub>	3229
		Stacker	ctgggtgctgaattcactgtg	3230
		Arrestor	aaccicaaccgagggcg	3231
Human CYP 2E1	1	Stacker	ctgggtgctgaattcac	3232
		Probe	AACGAGGCGCACCCGAGCCCA-NH <sub>2</sub>	3233
		Invader	GCATCACCCACCATGCGCTGA	3234
		Stacker	cgtacagcgtgaacaccg	3235
		Arrestor	gcataccaccatgcgctga	3236

1	Probe	AACGAGGCGCACCCCTGAGTGC-NH <sub>2</sub>	3237
	Invader	GCTGGCCTTGGGTCTTA	3238
	Stacker	ttcagcaggaagtg	3239
	Arrestor	gcactcagggtgcgc	3240
1	Probe	AACGAGGCGCACCCACGAGCA-NH <sub>2</sub>	3241
	Invader	CTGTGCTTTTCTCTCCATTTA	3242
	Stacker	ggcagtcggtgagg	3243
	Arrestor	tgctcgtgggtgcgc	3244
1	Probe	AACGAGGCGCACCTTGGCACTAC-NH <sub>2</sub>	3245
	Invader	GTTGTATACAAAACAGAGTCCAGAGA	3246
	Invader	gtcatacaacaacagagTCCAGAGA	3247
	Stacker	gactgtcccttgg	3248
	Arrestor	gtagtccaagtgcgc	3249
1	Probe	AACGAGGCGCACCTTGGCAGGACA-NH <sub>2</sub>	3250
	Invader	gtacagaaatgagggaAAAAAGATGAGA	3251
	Stacker	ctcagcagaaggatgg	3252
	Arrestor	tgctcgtccaagtgcgc	3253
	Stacker	ctcagcagaggatgg	3254
2	Probe	CCGTACACGCCTCTTGGCAGGACA-NH <sub>2</sub>	3255
	Arrestor	tgctcgtccaagaggcg	3256
1	Probe	AACGAGGCGCACCTTGGCAGGAC-NH <sub>2</sub>	3257
	Stacker	actcagcagaaggatgg	3258
	Arrestor	gtcctgccaagtgcgc	3259
1	Probe	AACGAGGCGCACCTTGGCAGGA-NH <sub>2</sub>	3260
	Stacker	cactcagcagaaggatgg	3261
	Arrestor	tcctgccaagtgcgc	3262

Rat CYP 4A2

Rat CYP 4A2	1	Probe	AACGAGGCGCACCCGATTGTCC-NH <sub>2</sub>	3263
		Invader	gatttctagaacattttaATTCATGATGA	3264
		Stacker	caagactctgagaactgaagg	3265
		Arrestor	ggacaatcgggtgcgc	3266
	2	Probe	CCGTCACGCCTCCCGATTGTCC-NH <sub>2</sub>	3267
		Arrestor	ggacaatcgggagggcg	3268
Rat CYP 4A2	1	Probe	AACGAGGCGCACTACTATTATTTTCATAG-NH <sub>2</sub>	3269
		Invader	CATTTCTATCTACTGTTCTGCATCAGA	3270
		Stacker	aaaagatgaggcatataatttc	3271
		Arrestor	ctatgaaataatagtagtgcgc	3272
	1	Probe	AACGAGGCGCACTACTATTATTTTCATAG-NH <sub>2</sub>	3273
		Stacker	aaagatgaggcatataatttc	3274
		Arrestor	tctatgaaataatagtagtgcgc	3275
	2	Probe	CCGTCACGCCTCTACTATTATTTTCATAG-NH <sub>2</sub>	3276
		Arrestor	tctatgaaataatagtagagggcg	3277
	1	Probe	AACGAGGCGCACAGGTGTCTGGAG-NH <sub>2</sub>	3278
Rat CYP 4A2		Invader	GGTCCACGCACAAAGCTGGGAC	3279
		Stacker	taaaagctacagaaatgagggc	3280
		Arrestor	ctccagacacctgtgcgc	3281
	2	Probe	CCGTCACGCCTCAGGTGTCTGGAG-NH <sub>2</sub>	3282
		Arrestor	ctccagacacctgagggcg	3283
	1	Probe	AACGAGGCGCACAGGTGTCTGGAGT-NH <sub>2</sub>	3284
		Stacker	aaaagctacagaaatgagggc	3285
		Arrestor	actccagacacctgtgcgc	3286



Rat CYP Pan 3A	2	Probe	CCGTCACGCCCTCGTTCCTGGG-NH <sub>2</sub>	2028
		Invader (degenerate)	GAGCAAACTCATGYCAATRCAC	3287
		Stacker (degenerate)	tccattYccaaagggcag	3288
		Arrestor	cccaggaaacgaggcg	2034
Rat CYP 4A3	1	Probe	AACGAGGCGCACCTTTTGCTCCC-NH <sub>2</sub>	3289
		Invader	GGTCATAGAGCAGGACTCGTGA	3290
		Stacker	tgagagccactgtaag	3291
		Arrestor	gggagcaaaagtgcgc	3292
	2	Probe	CCGTCACGCCCTCTTTTGCTCCC-NH <sub>2</sub>	3293
		Arrestor	gggagcaaaagaggcg	3294
Rat CYP 4A3	1	Probe	AACGAGGCGCACGTTGTGATACCTT-NH <sub>2</sub>	3295
		Invader	gatgaaggccataaattAAAAATTGTGC	3296
		Stacker	tgggtatggaacgtcc	3297
		Arrestor	aagggtatcaaacgtgcgc	3298
	2	Probe	CCGTCACGCCCTCGTTCGTTGTGATACCTT-NH <sub>2</sub>	3299
		Arrestor	aagggtatcaaacgaggcg	3300
	1	Probe	AACGAGGCGCACCTTTGTGATACCTTT-NH <sub>2</sub>	3301
		Invader	gatgaaggccataaattAAAAATTGTGGA	3302
		Stacker	gggtatggaacgtccat	3303
		Arrestor	aaagggtatcaaacgtgcgc	3304
	2	Probe	CCGTCACGCCCTCTTTGTGATACCTTT-NH <sub>2</sub>	3305
		Arrestor	aaagggtatcaaacgaggcg	3306

Rat CYP 4A3	1	Probe	AACGAGGCGCACCCATAGGGACC-NH <sub>2</sub>	3307
		Invader	CCATTCTTGGACTTCAACACAAAGTCTTGA	3308
		Stacker	gggatccctggg	3309
		Arrestor	ggccctatggg	3310
	2	Probe	CCGTCACGCCCTCCCATAGGGACC-NH <sub>2</sub>	3311
		Arrestor	ggccctatggg	3312
	1	Probe	AACGAGGCGCACATGACGGGACAC-NH <sub>2</sub>	3313
		Invader	GCTACAGAAATGAGGGCAAAAAAATGAGC	3314
		Stacker	tcagcagaggatggg	3315
		Arrestor	gtgccgcatg	3316
	2	Probe	CCGTCACGCCCTCATGACGGGACAC-NH <sub>2</sub>	3317
		Arrestor	gtgccgcatg	3318
Human/Mouse HES-1	1	Probe	AACGAGGCGCACCTGACTTTCTGTG-NH <sub>2</sub>	3319
		Invader	CGTCTTTTCTCCATAATAGGCTTTTGAA	3320
		Stacker	atcagatgctgcttgg	3321
		Arrestor	cacagaaagtcagtcgc	3322
		Stacker	gtcagatgctgcttgg	3323
		Stacker	ctaagatgctgcttgg	3324
		Stacker	ctgagatgctgcttgg	3325
		Stacker	atcagaggccgcttgg	3326
		Stacker	atcagaggccgcttgg	3327
	1	Probe	5'- AAC GAG GCG CAC CCG GTT CTC NH2-3'	3328
		Invader	5'- GAT CTC CTC CGG GTA GAA CGA A -3'	3329
		Stacker	5'- gcc ctt gta gtt cac -3'	3330
		Arrestor	5'-gag aac cgg gtg cgc -3'	3331
rat HSP70-1,2	1	Probe	AACGAGGCGCACACTCGAAGC-NH <sub>2</sub>	3332
		Invader	GGCGGGATGCCGCTCAC	3333
		Stacker	gccccagcagg	3334
		Arrestor	gtctcgagtg	3335

rat HSP70-1,2	1	Probe	AACGAGGCGCACGGTACGCCT-NH <sub>2</sub>	3336
		Invader	CACCGGGTGGCCAC	3337
		Stacker	cgcgatctctca	3338
		Arrestor	aggcgaccgtgcgc	3339
	1	Probe	AACGAGGCGCACGGTACGCCTC-NH <sub>2</sub>	3340
		Stacker	ggcgatctctcat	3341
	2	Arrestor	gaggcgaccgtgcgc	3342
		Probe	CCGTACAGCCTCGGTACGCCTC-NH <sub>2</sub>	3343
	1	Arrestor	gaggcgaccgtgcgc	3344
		Probe	AACGAGGCGCACGTACGCCTC-NH <sub>2</sub>	3345
		Invader	ACCGGTGGCCACG	3346
rat HSP70-1,2,3	3	Arrestor	gaggcgaccgtgcgc	3347
		Probe	CCGTGCTGCGTGCTCAACTC-NH <sub>2</sub>	3348
		Invader	GCCGGCGGGATGCCC	3349
		Stacker	gaagcgcccg	3350
		Arrestor	gagtgagcacgcagc	3351
	1	Probe	AACGAGGCGCACCCAGCACCATG-NH <sub>2</sub>	3352
		Invader	GCGATCTCCTTCATCTTGGTA	3353
		Invader	CAGTCTCCTTCATCTTGGTA	3354
		Stacker	gcgatctctctcatctfgta	3355
		Arrestor	catggcgctggcg	3356
rat HSP70-1,2,3	1	Probe	AACGAGGCGCACCCATGGCCC-NH <sub>2</sub>	3357
		Invader	CAGGTTGTTGTCGCCGTA	3358
		Invader	GAGGTTGTTGTCGCCGTA	3359
		Stacker	tcgcgccctcgta	3360
		Arrestor	gggccatggtgcgc	3361

rat HSP70-1,2,3	1	Probe	AACGAGGCGCACCTGGATCA-NH <sub>2</sub>	3362
		Invader	CCCTCTCGCCCTCGTAA	3363
		Stacker	gcacccgggc	3364
		Arrestor	tgatccagggtgtgcgc	3365
rat HSP70-1,2,3	1	Probe	AACGAGGCGCACTCAGCACCA-NH <sub>2</sub>	3366
		Invader	GGCGATCTCCTTCATCTTGA	3367
		Invader	TGCAGTCTCCTTCATCTTGA	3368
		Stacker	tggacgagatctctc	3369
		Arrestor	tggtgtgagtgcgc	3370
Human AGC 1,2	1	Probe	AACGAGGCGCACCCACTAGCTC-NH <sub>2</sub>	3371
		Invader	AGTTCAGTTCCTGAAGGGAGTA	3372
		Stacker	tccactaatgtccagc	3373
		Arrestor	gagctagtgggtgcgc	3374
Human AGC 1,2	1	Probe	AACGAGGCGCACCCCTTGTCTC-NH <sub>2</sub>	3375
		Invader	CGTCTCACACCCAGGAACTCATA	3376
		Stacker	catagcagccttc	3377
		Arrestor	gagacaaagggtgcgc	3378
rat GRM1	1	Probe	AACGAGGCGCACCTTCTCATCTC-NH <sub>2</sub>	3379
		Invader	GCATCGGTTACGCCCATCA	3380
		Stacker	ggatggaatcaggaggt	3381
		Arrestor	gagatgagaagggtgcgc	3382
	2	Probe	CCGTCACGCCCTCCTTCTCATCTC-NH <sub>2</sub>	3383
		Arrestor	gagatgagaaggaggtgcgc	3384
	3	Probe	CCGTCGCTGCGTCTTCTCATCTC-NH <sub>2</sub>	3385
		Arrestor	gagatgagaaggaggtgcgc	3386

rat GRM1	1	Probe	AACGAGGCGCACCCCTTCTCATC-NH <sub>2</sub>	3387
		Invader	GCATCGGTTCAGCCCAT	3388
		Stacker	tcggatggaatcaggag	3389
		Arrestor	gatgagaagggtgcgc	3390
		Probe	CCGTCACGCCTCCCTTCTCATC-NH <sub>2</sub>	3391
	2	Arrestor	gatgagaaggaggcg	3392
rat GRM2	1	Probe	AACGAGGCGCACGAGAGATGAGGAGAGGG-NH <sub>2</sub>	3393
		Invader	GGCCAGGAAAGGACAGACAGGAAA	3394
		Arrestor	ccctctcatctctcgtgcgc	3395
rat GRM2	1	Probe	AACGAGGCGCACGAGAGATGAGGAGAGG-NH <sub>2</sub>	3396
		Invader	GCCAGGAAAGGACAGACAGGAAC	3397
		Arrestor	cctctctcatctctcgtgcgc	3398
rat GRM5	1	Probe	AACGAGGCGCACTGGAGGAACTCAG-NH <sub>2</sub>	3399
		Invader	ggaattcaagctaataaaGATATCATGAA	3400
		Stacker	agctccaataggtagcagcc	3401
		Arrestor	ctgagttctctccagtgccgc	3402
		Probe	AACGAGGCGCACTCCTTTCCAAG-NH <sub>2</sub>	3403
rat GRM5	1	Invader	CAAGAGTGTGGGATCTGAGTTGAA	3404
		Stacker	gtatgcagcatggcc	3405
		Arrestor	cttgaaaaggagtgccgc	3406
		Stacker	gtatgcagcatggccctc	3407
		Probe	AACGAGGCGCACTCGGCCCA-NH <sub>2</sub>	3408
rat GRM5	1	Invader	CCATCTGTACGTCATACCTGA	3409
		Stacker	gccatcacigccc	3410
		Arrestor	tggccgagtgccgc	3411
		Invader	ccatctgcacGTCATACCTGA	3412

rat GRM7	1	Probe	AACGAGGCGCACGTCCTGTGC-NH <sub>2</sub>	3413
		Invader	AGTCTTTTCCAATTCGCTCCTC	3414
	2	Stacker	attgcgatctgtcttc	3415
		Arrestor	gcacaggacgtgcgc	3416
		Probe	CCGTCACGCGCTCGTCCTGTGC-NH <sub>2</sub>	3417
		Arrestor	gcacaggacgaggcg	3418
rat TAC1	1	Probe	AACGAGGCGCACCTTCTTTCATAAG-NH <sub>2</sub>	3419
		Invader	CTTCTTTTCGTAGTTCGCAATTCGGA	3420
	2	Stacker	ccacagaatttaaagctcttttg	3421
		Arrestor	cttatgaaagaagggtgcgc	3422
		Probe	CCGTCACGCGCTCCTTCTTTCATAAG-NH <sub>2</sub>	3423
		Arrestor	cttatgaaagaaggaggcg	3424
rat CYP 7A1	2	Probe	CCG TCA CGC CTC GTC TTG GCC-NH <sub>2</sub>	3425
		Invader	5' GCC CAG AGA ATA GCG AGG TGC A 3'	3426
		Stacker	5' ttc tcc atg tgc tca aag gtg g 3'	3427
		Arrestor	5' ggc caa gac gag gcg 3'	3428
human PPAR-alpha	1	Probe	AACGAGGCGCACCTTTCAGTTTTG-NH <sub>2</sub>	3429
		Invader	TCTATGTCATGTTTCACAGGTAAGAAATTTCTGA	3430
	2	Stacker	cttctcagatcttggc	3431
		Arrestor	caaaactgaaagggtgcgc	3432
		Probe	CCGTCACGCGCTCCTTTCAGTTTTG-NH <sub>2</sub>	3433
		Arrestor	caaaactgaaaggaggcg	3434

Assays	SRT #	Oligo Type	Secondary system	Oligo Sequence (5' to 3')	SEQ ID NO
rat GPCR/CNS2	1	Probe	FRET probe	FL-CAC-Z28-TGC TTC GTG G	3435
		Invader	Secondary Reaction Template 1	CCA GGA AGC AAG TGG TGC GCC TCG tt	3436
		Stacker	Secondary Reaction Template 2	CCA GGA AGC AAG TGG AGG CGT GAC ggt	3437
		Arrestor	Secondary Reaction Template 3	CCA GGA AGC AAG TGA CGC AGC GAC ggt	3438
human P53AIP1	1	Probe		5'- AACGAGGGCGCACCCAGGTGTG-NH2-3'	3443
		Invader		5' -TCACTGCAGGGACTTACCCAGA- 3'	3444
		Stacker		tggtctgagccc	3445
		Arrestor		acacctgggtgcgc	3446
human P53AIP1	1	Probe		AACGAGGGCGCACCCAGGTGT NH2	3447
		Stacker		gtgtctgagccc	3448
		Probe		AACGAGGGCGCACCCCTTCCTCT NH2	3449
		Invader		GGAGGAGGAGGGGCTGGA	3450
human P53AIP1	1	Stacker		tggactattgatcaggg	3451
		Arrestor		agaggaaaggtgcgc	3452
human P53AIP1	1	Probe		AACGAGGGCGCACCTTCATTATTGGC NH2	3453
		Invader		CCACAAGCTTCCGAGTGCGTCATA	3454
		Stacker		cacaggaacgactcttgg	3455
		Arrestor		gccataatgaaggtgcgc	3456

human P53AIP1	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCGCTGCGT NH2 GGCCCTGCACCTCAGAA gtgagcttctg99g acgcagcgggtgcgc	3457 3458 3459 3460
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTGTCCGTC NH2 CAGATTACGCCAGAGTGTAAGTAGA ttcttgagcaaaaggtag agacggacagggtgcgc	3461 3462 3463 3464
	1 Probe Stacker	AACGAGGCGCACCTGTCCGTCT NH2 tcttgagcaaaaggtagt	3465 3466
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGAGTGTG NH2 GCAGAAGCAGTTCCAGATTTCAGA aagtagctgtccgtct cacactctgggtgcgc	3467 3468 3469 3470
	1 Probe Stacker	AACGAGGCGCACCCAGAGTGT NH2 gaagtagctgtccgtc	3471 3472
mouse LLPL	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCCAGAAAGTAGAGCA NH2 AGACTTGTGGCTGCCGCTGA tgtacacgttgcccatg tgcttacttcttggtgcgc	3473 3474 3475 3476



Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3477
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3478
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3479
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3480
Assays mArbp	SRT #	Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO
	1	Probe	AACGAGGCGCACCATGCGGATCT NH2	3481
		Invader	gcctccCTCGGAGCGAA	3482
		Stacker	gctgcatctgcttga	3483
		Arrestor	agatccgcatggtgcgc	3484
mArbp	1	Probe	AACGAGGCGCACCTGCACATCAC NH2	3485
		Invader	CACCTTGTCGCCAGTCTTTATCAGA	3486
		Stacker	tcagaattcaatggtgcc	3487
		Arrestor	gtgatgtgcagggtgcgc	3488
mArbp	1	Probe	AACGAGGCGCACCTGCACATCACT NH2	3489
		Stacker	cagaattcaatggtgcct	3490
mArbp	1	Probe	AACGAGGCGCACCTCCACAGACAA NH2	3491
		Invader	CAGTAAGTGGGAAGGTGTACTCAGTA	3492
		Stacker	tgccaggacgcgc	3493
		Arrestor	ttgtctgtggagggtgcgc	3494
mArbp	1	Probe	AACGAGGCGCACCTCCAGGTG NH2	3495
		Invader	TCTCCAGAGCTGGGTGTTA	3496
		Stacker	gccccgtatagcc	3497
		Arrestor	acctggagggtgcgc	3498

mArbp	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCATGCGGATCTG NH2 GCCTTCCCTCGGAGCGAA ctgcatctgttgag cagatccgcatgtgtgagc	3499 3500 3501 3502
mArbp	1	Probe Invader Stacker Arrestor	AACGAGGCGCACACATGCGGATCT NH2 GCCTTCCCTCGGAGCGC gctgcatctgttg agatccgcatgtgtgagc	3503 3504 3505 3506
rABCB11	2	Probe Invader Stacker Arrestor	CCGTACGCGCTCCCATATTGCTACA NH2 TTGTCCCGTACTTGATGTTGTA gtcaaacagcactggc ttagcataatggaggcg AACGAGGCGCACCCATTATGCTACA NH2 ttagcataatgggtgagc	3507 3508 3509 3510 3511 3512
rABCB11	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGAGACAATCC NH2 GTCAAACAGCACTGGCTCCTGC cgatgttgaacggaggaaac ggattgtctcgtgagc CCGTACGCGCTCGGAGACAATCC NH2 ggattgtctcgtgagcg	3513 3514 3515 3516 3517 3518
rABCB11	1	Probe Invader Stacker Arrestor	AACGAGGCGCACGAGATTCCGTAT NH2 AGCCATATCCAGAGCAAGATCCTTGC gagggtcgggc atacgaatccgtgagc CCGTACGCGCTCGGATTCCGTAT NH2 atacgaatccgtgagcg	3519 3520 3521 3522 3523 3524

hAPOA1	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCTTCTGGC NH2 CTCTTGACAGCTCGTGCAGA gcgcgcctct gccagaaggtgcgc AACGAGGCGCACCTTCTGGCG NH2 cgcgccctcttg	3525 3526 3527 3528 3529 3530
hAPOA1	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCGCTGTAGG NH2 GCTGGCGCAGCTCGTA gggccagatgcgt cctacagcggtgcgc	3531 3532 3533 3534
hLCAT	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCTCAGCCTT NH2 GGCCGTGTGTGGTTACTGAGA ggcggtggtgc aaggctgaggtgcgc AACGAGGCGCACCTCAGCCTTG NH2 ggcggtggtgcg	3535 3536 3537 3538 3539 3540
hLCAT	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCGCCTTGG NH2 CCGTGTGTGGTTACTGAGCTA gcgtggtggtgcgc ccaaggcgtggtgcgc	3541 3542 3543 3544
hIVL	1	Probe Invader Stacker Arrestor Probe Stacker	AACGAGGCGCACCGCTCCTTC NH2 GCTCCTGCTCCTGTGC tgctgtgctcacattc gaaggagcgtgcgc AACGAGGCGCACCGCTCCTTCT NH2 gcgtgtgctcacattct	3545 3546 3547 3548 3549 3550

hIVL	2	Probe Invader Stacker Arrestor	CCGTACGCCCTCGCTCCTTCTGC NH2 CAGCTCCTGCTCCTGTGC TGTTGCTCACATTCTTGCTCAGGC gcagaaggagcgaggcg	3551 3552 3553 3554
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTGGACGTTG NH2 GGAAGAACAAATTTCAATCATTTTCATAGTACATA gtggcagcccg caacgtccagggtgcgc	3555 3556 3557 3558
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATCATTTTCATAGTACA NH2 GGCAGTGGTGAAGAACAAATTTTCAC tctggacgttggtgg tgtactatgaaatgatgtgcgc	3559 3560 3561 3562
rGPR37	1	Probe Invader Stacker Arrestor	AACGAGGCGCACATCATTTTCATAGTACATCT-NH2 agttggcagtggtggaagaaCAATTTTCAG ggacgttggtggcagccc agatgtactatgaaatgatgtgcgc	3563 3564 3565 3566
rEsr2 (rER Beta)	1	Probe Invader Stacker Arrestor	AACGAGGCGCACCTCTAGTGATCT NH2 CTCTCTGTTTACAGGTAAGGTGTGA tgctcacaccaaggac agatcactagagggtgcgc	3567 3568 3569 3570
rEsr2 (rER Beta)	2	Probe Invader Arrestor	CCGTACGCCCTCCTCTAGTGATCTTGCT-NH2 GTCCTCTGTTTACAGGTAAGGTGTGG agcaagatcactagaggaggcg	3571 3572 3573

Secondary system		Oligo Sequence (5' to 3')	SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G	3574
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt	3575
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt	3576
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt	3577
Assays	SRT # Oligo Type	Oligo Sequence (5' to 3')	SEQ ID NO
human PTGS2	1 Probe	5'-AACGAGGGCGCACAGAGGTTAGAGAAAG-NH2-3'	3578
	Invader	5'-GGAGGAAGGGCTCTAGTATAATAGGC-3'	3579
	Stacker	5'-gctcccagcttttagc -3'	3580
	Arrestor	5'-cttctctaacctctgtgcgc -3'	3581
human FACL1,2	2 Probe	5'-CCGTCACGCCTCGTTGGCTCTTCCC-NH2-3'	3582
	Invader	5'-GGCTTGGGCTTCCGTCTC-3'	3583
	Arrestor	5'-gggaagagccaacgagggcg-3'	3584
rat RPS29	2 Probe	5'-CCGTCACGCCTCGCCTATGTCTT NH2-3'	3585
	Invader	5'-AGGTCGCTTAGTCCAACTTAATGAAC-3'	3586
	Stacker	5'-cggtactgaaggagcactgtc-3'	3587
	Arrestor	5'-aaggacataggcgaggcg-3'	3588
human RPL5	1 Probe	5'-AACGAGGGCGCACGCTTCCGATGTACT NH2-3'	3589
	Invader	5'-GCATGTAACTGCAACATTCGGCCCATGATGTA-3'	3590
	Stacker	5'-TCTGCATTAAATTCCTTGCTTTCAGAAATCATAACCAGGG-3'	3591
	Arrestor	5'-agtacatcggaagcggtgcgc-3'	3592
	1 Probe	5'-AACGAGGGCGCACGCTTCCGA NH2-3'	3593
	Invader	5'-GCAACATTCTGGCCCATGATGTC-3'	3594
	Stacker	5'-tgtactctgcattaaattcct-3'	3595
	Arrestor	5'-toggaagcggtgcgc-3'	3596

1	Probe	5'-AACGAGGCGCACCTTCCGAT NH2-3'	3597
	Invader	5'-GCAACATTCTGGCCCATGATGTGA-3'	3598
	Stacker	5'-gtacttctgcattaaattcct-3'	3599
	Arrestor	5'-atcggaaggtagcg-3'	3600
2	Probe	5'-CCGTCACGCCTCCTCTTTGCTTAAC NH2-3'	3601
	Invader	5'-CATTTTCCTTGGCTAGAAACGAACTCTGTACGTATAAGGACA-3'	3602
	Stacker	5'-tgaatgtctgctgtcatcatca-3'	3603
	Arrestor	5'-gttaagcaagaggaggcg-3'	3604
2	Probe	5'-CCGTCACGCCTCCGATTCCCTTCCA NH2-3'	3605
	Invader	5'-CACGTCTGTCTTATAGTGGAGACTCAA-3'	3606
	Stacker	5'-CATACCGATAGATGATTTCCAGAGCCGC-3'	3607
	Arrestor	5'-tggaaaggaatcgaggcg-3'	3608
1	Probe	5'-AACGAGGCGCACCGAACAGTGT NH2-3'	3609
	Arrestor	5'-acactgtcgtgtagcg-3'	3610
2	Probe	5'-CCGTCACGCCTCCGAACAGTGT NH2-3'	3611
	Arrestor	5'-acactgtcgtgtagcg-3'	3612
	Invader	5'-GCAGGGAGAAATCAGCTTA-3'	3613
	Stacker	5'-gcctcctcca-3'	3614
1	Probe	5'-AACGAGGCGCACGTACTCGTAGG NH2-3'	3615
	Arrestor	5'-cctacgagtagtagcg-3'	3616
2	Probe	5'-CCGTCACGCCTCGTACTCGTAGG NH2-3'	3617
	Arrestor	5'-cctacgagtagtagcg-3'	3618
	Invader	5'-CACGCTGGCCCGCAGC-3'	3619
	Stacker	5'-gcatgtccagcttg-3'	3620
2	Probe	5'-CCGTCACGCCTCTTGTAGACATCCTG NH2-3'	3621
	Invader	5'-GCCAACAGGAACAGTACCAATACCACTTA-3'	3622
	Stacker	5'-GAGAGGCAGCGCAAGGG-3'	3623
	Arrestor	5'-caggatgtctacaagaggcg-3'	3624

mouse ABCA1	2	Probe	5' CCGTCACGCGCTCCCCGTTTTC-NH2 3'	3625
		Arrestor	5' gaaacgggaggcg 3'	3626
	1	Probe	5'-AACGAGCGCACCCCGTTTTC NH2-3'	3627
		Arrestor	5'-gaaacggggtgcgc-3'	3628
		Invader	5' GGGCATCTGTTGCACGTAGACAA 3'	3629
		Stacker	5' ttctcagatccgctc 3'	3630
	2	Probe	5'-CCGTCACGCGCTCCCCGTTTTC NH2-3'	3631
		Invader	5' GGGCATCTGTTGCACGTAGACAA 3'	3632
		Stacker	5'-tctcagatccgctca-3'	3633
		Arrestor	5'-agaaaacgggaggcg-3'	3634
human ABCC2	1	Probe	5'- AAC GAG GCG CAC CTC CAA TCT CA NH2-3'	3635
		Invader	5'- CCC CCA CTA AGA TTT ATA CCC TTC TA -3'	3636
		Stacker	5'- gcc aaa tct cct cca -3'	3637
		Arrestor	5'-tga gat tgg agg tgc gc -3'	3638
	1	Probe	5'-AACGAGCGCGCACTCGGACTGT NH2-3'	3639
		Invader	5'-GCCATAATGTCCAGGTTACATCA-3'	3640
		Stacker	5'-ggctccgaatcatgtt-3'	3641
		Arrestor	5'-acagtcgagtgcg-3'	3642
	1	Probe	5'-AACGAGCGCGCACCAACCTGTTCA NH2-3'	3643
		Invader	5'-CATCCACTGTGGAAATATCGCCGGA-3'	3644
		Stacker	5'-caatccggcctgtg-3'	3645
		Arrestor	5'-tgaacagggttggtgcgc-3'	3646
human NR1I2	1	Probe	5'- AACGAGCGCGCACGCAACTCGCA NH2-3'	3647
		Invader	5'- GGCTGCAGAGACTCTGC -3'	3648
		Stacker	5'- gccactgctaagcac -3'	3649
		Arrestor	5'- tgcgagtggtgcgc -3'	3650

1	Probe	5'-AACGAGGCGCACCCCTCTCTGA NH2-3'	3651
	Invader	5'-GCCTTTTAAAGGAAAGGGCAACCTTGA-3'	3652
	Stacker	5'-tggctctgacctaca-3'	3653
	Arrestor	5'-tcagagagggtgcgc-3'	3654
1	Probe	5'-AACGAGGCGCACGATAGCCAG NH2-3'	3655
	Invader	5'-TGCATCCTTCACATGTCATGACATTGAAGTC-3'	3656
	Stacker	5'-tggccttgctccc-3'	3657
	Arrestor	5'-ctggctatcgtgcgc-3'	3658
1	Probe	5'-AACGAGGCGCACGCGAGTGTCT-3'	3659
	Invader	5'-AAGTTGCTGGAAGCCACCTC-3'	3660
	Stacker	5'-tccaagcagtaggaca-3'	3661
	Arrestor	5'-agacacgtgcgtgcgc-3'	3662
human ABCB1	Probe	5'- AAC GAG GCG CAC CAT CCA GAG NH2-3'	3663
	Invader	5'- CCT CCA AAA GGA AAC TGG AGG TAT ACT TTA -3'	3664
	Stacker	5'- cct ctt tgg tac taa gc -3'	3665
	Arrestor	5'- ctc tgg atg gtc cgc -3'	3666
1	Probe	5'-AACGAGGCGCACCTTCTATTAGTGA NH2-3'	3667
	Invader	5'-CAGATTCA TGAAGAACCCTGTATCATTTGATATCAA-3'	3668
	Stacker	5'-tgttgacatcagatcttctaaat-3'	3669
	Arrestor	5'-tcactaatagaagggtgcgc-3'	3670
1	Probe	5'-AACGAGGCGCACAAATATCCTGTCC NH2-3'	3671
	Invader	5'-CCCCGTAGAAACCTTACATTTATGGTCCTC-3'	3672
	Stacker	5'-atcaacactgaccatccccctcgt-3'	3673
	Arrestor	5'-ggacaggatattgtgcgc-3'	3674



1	Probe	5'-AACGAGGCGCACCATTTCTGCTG NH2-3'	3675
	Invader	5'-GATTCATCAGCTGCAATTTCTAATCAACTTA-3'	3676
	Stacker	5'-tcgtcattgtacaagtttg-3'	3677
	Arrestor	5'-cagcaggaaatggtgcgc-3'	3678
2	Probe	5'-CCGTCAACGCTCCATCCAGAG NH2-3'	3679
	Invader	5'-CCTCCAAAAGGAAACTGGAGGTATACTTTA-3'	3680
	Stacker	5'-cctcttggtaagc-3'	3681
	Arrestor	5'-cicgtgatggaggcg-3'	3682
1	Probe	5'-AACGAGGCGCACCTTTCAAGGTG NH2-3'	3683
	Invader	5'-CTGTAGGCCCAAGACGTA-3'	3684
	Stacker	5'-acaggcttgcctgt-3'	3685
	Arrestor	5'-cacctgaaaggcgccctcgtt-3'	3686
1	Probe	5'-AACGAGGCGCACTTCACTCCAAAT NH2-3'	3687
	Invader	5'-TCTTGTGGATTGTTGAGAGATCGATGA-3'	3688
	Stacker	5'-gatgtctagtcacatc-3'	3689
	Arrestor	5'-atttggagtgaagtcgcctcgtt-3'	3690
1	Probe	5'-AACGAGGCGCACTCACTCCAAAT NH2-3'	3691
	Invader	5'-TTGTGGATTGTTGAGAGATCGATGTA-3'	3692
	Stacker	5'-gatgtctagtcacatc-3'	3693
	Arrestor	5'-atttggagtgaagtcgcctcgtt-3'	3694
1	Probe	5'-AACGAGGCGCACCATTAATGAAGGAGAG NH2-3'	3695
	Invader	5'-GGGTGAGTGGCCAGTTCATAA-3'	3696
	Stacker	5'-aacactgcctggttt-3'	3697
	Arrestor	5'-cctcttcattatggtgcgc-3'	3698

h3A4

1	Probe	5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3'	3699
	Invader	5'-GGTGAGTGGCCTGTTTCATACC-3'	3700
	Stacker	5'-aacactgctcgtggtt-3'	3701
	Arrestor	5'-ctctccttcattatctgcgc-3'	3702
1	Probe	5'-AACGAGGCGCACGAGAGCAAAACCT NH2-3'	3703
	Invader	5'-ACTCTGATTAGAGCAAGTTTCATGTTTCATC-3'	3704
	Stacker	5'-catgccaatgcagttct-3'	3705
	Arrestor	5'-aggttgctcctcgtgcgc-3'	3706
h3A7	Probe	5'-AACGAGGCGCACGTTTCAAGGTG NH2-3'	3707
	Invader	5'-CTGTAGGCCCCCAAGACGTC-3'	3708
	Stacker	5'-acaggcttgccgt-3'	3709
	Arrestor	5'-cacctfgaaacgtgcgcctcgtt-3'	3710
1	Probe	5'-AACGAGGCGCACCTTTCAAGGTG NH2-3'	3711
	Invader	5'-CTGTAGGCCCCCAAGACGTGA-3'	3712
	Stacker	5'-acaggcttgccgt-3'	3713
	Arrestor	5'-cacctfgaaagtgccctcgtt-3'	3714
1	Probe	5'-AACGAGGCGCACCTCACTCCAAAT NH2-3'	3715
	Invader	5'-TCTTGTGGATTGTTGAGAGAGTCGATGA-3'	3716
	Stacker	5'-gatgctcagatcacatc-3'	3717
	Arrestor	5'-atttggagtgaggtgccctcgtt-3'	3718
1	Probe	5'-AACGAGGCGCACACTATAATGAAGGAGAG NH2-3'	3719
	Invader	5'-GGGTGAGTGGCCAGTTCATAA-3'	3720
	Stacker	5'-aacactgctcgtggtt-3'	3721
	Arrestor	5'-ctctccttcattatagtcgc-3'	3722

1	Probe	5'-AACGAGGCGCAGATAATGAAGGAGAG NH2-3'	3723
	Invader	5'-GGGTGAGTGGCCAGTTCATATC-3'	3724
	Stacker	5'-aacactgctcgtggtt-3'	3725
	Arrestor	5'-ctctctcattatctgagc-3'	3726
1	Probe	5'-AACGAGGCGCACCCGAGAGCAAACC NH2-3'	3727
	Invader	5'-TCTGACTAGAGCAAGTTTCATGTTCAA-3'	3728
	Stacker	5'-tcattgccaatgcagtttc-3'	3729
	Arrestor	5'-ggtttgctcgtgagc-3'	3730
1	Probe	5'-AACGAGGCGCAGGAGAGCAAACCT NH2-3'	3731
	Invader	5'-TCTGACTAGAGCAAGTTTCATGTTCAACC-3'	3732
	Stacker	5'-catgccaatgcagtttct-3'	3733
	Arrestor	5'-aggtttgctcctcgtgagc-3'	3734
1	Probe	5'-AACGAGGCGCACAGCATGATAAGCA NH2-3'	3735
	Arrestor	5'-tgcttatcctcgtgagc-3'	3736
	Probe	5'-CCGTACAGCCTCAGCATGATAAGCA NH2-3'	3737
	Arrestor	5'-tgcttatcctcgtgagc-3'	3738
	Invader	5'-GGTGCAGCCCCAGTGAGC-3'	3739
	Stacker	5'-gcaacattaacaccaggatgat-3'	3740
1	Probe	5'-AACGAGGCGCACGGAGGTGAATTAG NH2-3'	3741
	Arrestor	5'-ctaattcacctcgtgagc-3'	3742
	Probe	5'-CCGTACAGCCTCGGAGGTGAATTAG NH2-3'	3743
	Arrestor	5'-ctaattcacctcgtgagc-3'	3744
	Invader	5'-TCACAGCCCCATTTTCTTGTTCAC-3'	3745
	Stacker	5'-tggttaagcaccgtttct-3'	3746
1	Probe	5'-AACGAGGCGCACGGAGGTGAATTA NH2-3'	3747
	Arrestor	5'-taattcacctcgtgagc-3'	3748
	Probe	5'-CCGTACAGCCTCGGAGGTGAATTA NH2-3'	3749
	Arrestor	5'-taattcacctcgtgagc-3'	3750
	Invader	5'-TCACAGCCCCATTTTCTTGTTCAC-3'	3751
	Stacker	5'-gtgttaagcaccgtttct-3'	3752

rat SLC10A1

human CD36

1	Probe	5'-AACGAGGCGCACGACAGATTCCCTTT NH2-3'	3753
	Arrestor	5'-aaaggaatctgtgcgc-3'	3754
	Probe	5'-CCGTCACGCCCTCGACAGATTCCCTTT NH2-3'	3755
	Arrestor	5'-aaaggaatctgtgcgcgc-3'	3756
	Invader	5'-ATGTCGCAGTGACTTTCCCAATAGC-3'	3757
2	Stacker	5'-tacccttatatgtgcgattatgg-3'	3758
	Probe	5'-AACGAGGCGCACGGTTTTTCAACTG NH2-3'	3759
	Arrestor	5'-cagttgaaacccgtgcgc-3'	3760
	Probe	5'-CCGTCACGCCCTCGGTTTTTCAACTG NH2-3'	3761
	Arrestor	5'-cagttgaaacccgtgcgc-3'	3762
1	Invader	5'-TCTGTGCAGAAACAAATAGTTGTCTGC-3'	3763
	Stacker	5'-gagaggcaaggcct-3'	3764
1	Probe	5'-AACGAGGCGCACCGTATTTGAAGACATAAG NH2-3'	3765
	Invader	5'-GGCTGACCATACTGTGCTCTAA-3'	3766
	Stacker	5'-taaaagcacaatatagctgct-3'	3767
	Arrestor	5'-cttatgtcttcaatacgggtgcgc-3'	3768
1	Probe	5'-AACGAGGCGCACCCAGCAGTAAAAACAT NH2-3'	3769
	Invader	5'-aggtaaaaggACAATGACATCAA-3'	3770
	Stacker	5'-gagaatttgcaattccaacg-3'	3771
	Arrestor	5'-atgttttactgctggtgcgc-3'	3772
1	Probe	5'-AACGAGGCGCACCTACATATCCAATATC NH2-3'	3773
	Invader	5'-CTTAGGAGTTATTTCTGATAGTGCTCAGATA-3'	3774
	Stacker	5'-cacgtacattttagcaaacacagagat-3'	3775
	Arrestor	5'-gatattggatatgtagggtgcgc-3'	3776
1	Probe	5'-AACGAGGCGCACCAAGGATATCATC NH2-3'	3777
	Invader	5'-cagattagagggaatTATAGAAAGTTGAAAAA-3'	3778
	Stacker	5'-gaagtaagaaatgaaatgtggcaattcc-3'	3779
	Arrestor	5'-gatatactcttctgtgtgcgc-3'	3780

human SLC21A6

human SLC21A8

1	Probe	5'-AACGAGGCGCAGTAAATGTGGTACCT NH2-3'	3781
	Invader	5'-CAGGTTGAACAATCTTCACAGTCAACAAGAA-3'	3782
	Stacker	5'-cctgttcagagagaacaaga-3'	3783
	Arrestor	5'-aggtagccatttagtgcgc-3'	3784
1	Probe	5'-AACGAGGCGCACGCTGTTGTC NH2-3'	3785
	Invader	5'-GCTGCAGTTGGTGTAGAAAAACCTGTC-3'	3786
	Stacker	5'-cagagcatccitggac-3'	3787
	Arrestor	5'-gacaacagcgtgcgc-3'	3788
1	Probe	5'-AACGAGGCGCACCCAAAATCCTCA NH2-3'	3789
	Invader	5'-GGCTGGGCATCCAGGA-3'	3790
	Stacker	5'-ggaacatgaactggatgcc-3'	3791
	Arrestor	5'-tgaggatttgggtgcgc-3'	3792
1	Probe	5'-CCGTACGCGCTCGCTAAGGCTC NH2-3'	3793
	Invader	5'-GTTCAATCCTACCTGACAGGAGATGC-3'	3794
	Stacker	5'-aaagaaggtagaccaggc-3'	3795
	Arrestor	5'-gagccttagcgaggcg-3'	3796
1	Probe	5'-AACGAGGCGCACCCCTTGACCTTC NH2-3'	3797
	Arrestor	5'-gaaggtaagggtgcgc-3'	3798
2	Probe	5'-CCGTACGCGCTCCCCTTGACCTTC NH2-3'	3799
	Arrestor	5'-gaaggtaagggtgcgc-3'	3800
	Invader	5'-TTGCGTTGCGGGCAACATAGACCAA-3'	3801
	Invader	5'-TTGCGTTTTCGGGCAACATAGACCAA-3'	3802
	Stacker	5'-tgatccaacagagtctgg-3'	3803
1	Probe	5'-AACGAGGCGCACCCCGCATCGAAG NH2-3'	3804
	Arrestor	5'-cttcgatgcgggtgcgc-3'	3805
2	Probe	5'-CCGTACGCGCTCCCCTTGACCTTC NH2-3'	3806
	Arrestor	5'-cttcgatgcgggtgcgc-3'	3807
	Invader	5'-CTGCCATCTTCTCCGCATAGTA-3'	3808
	Stacker	5'-cgctcattcgcgc-3'	3809

1	Probe	5'-AACGAGGCGCACCGCATAGTC NH2-3'	3810
	Arrestor	5'-gactatgagggtgagc-3'	3811
2	Probe	5'-CCGTACAGCCTCCCGCATAGTC NH2-3'	3812
	Arrestor	5'-gactatgagggtgagc-3'	3813
	Invader	5'-TGCAGCCTGCCATCTTCTA-3'	3814
	Stacker	5'-ggcatgaagcgctca-3'	3815
human UGT Pan 1A			
1	Probe	5'-AACGAGGCGCACCAATTGCCATAGC NH2-3'	3816
	Arrestor	5'-gctatggcaattggtgagc-3'	3817
2	Probe	5'-CCGTACAGCCTCCAAATTGCCATAGC NH2-3'	3818
	Arrestor	5'-gctatggcaattggtgagc-3'	3819
	Invader	5'-GAGGGATTTTGCCCAAGCATCAGA-3'	3820
	Stacker	5'-tttctctctggaattctg-3'	3821
1	Probe	5'-AACGAGGCGCACCGCTTTGCATT NH2-3'	3822
	Arrestor	5'-aatgcaaaagcgtgagc-3'	3823
2	Probe	5'-CCGTACAGCCTCCGCTTTGCATT NH2-3'	3824
	Arrestor	5'-aatgcaaaagcgtgagc-3'	3825
	Invader	5'-CAGCTCCCTTAGTCTCCATGA-3'	3826
	Stacker	5'-gtccatctgatacccaaac-3'	3827
1	Probe	5'-AACGAGGCGCACCGACGGCCAA NH2-3'	3828
	Arrestor	5'-ttggccgtcggtgagc-3'	3829
2	Probe	5'-CCGTACAGCCTCCGACGGCCAA NH2-3'	3830
	Arrestor	5'-ttggccgtcggtgagc-3'	3831
	Invader	5'-GTGATGAAGGCCACTGTGAGCAA-3'	3832
	Stacker	5'-gaggaaaccaatcacgtcc-3'	3833

Secondary system		Oligo Sequence (5' to 3')		SEQ ID NO
FRET probe		FL-CAC-Z28-TGC TTC GTG G		3834
Secondary Reaction Template 1		CCA GGA AGC AAG TGG TGC GCC TCG tt		3835
Secondary Reaction Template 2		CCA GGA AGC AAG TGG AGG CGT GAC ggt		3836
Secondary Reaction Template 3		CCA GGA AGC AAG TGA CGC AGC GAC ggt		3837
SRT # Oligo Type		Oligo Sequence (5' to 3')		SEQ ID NO
hCEACAM5	1 Probe	AACGAGGCGCACACTGTGAGCAGGA-NH <sub>2</sub>		3838
	Invader	GGTCCAGAAAGGTTAGAAGTGAGGCA		3839
	Stacker	gcctctgccagg		3840
	Arrestor	tcctgtcacagtgcgc		3841
hCEACAM5	1 Probe	AACGAGGCGCACAAATCACTGCGCC-NH <sub>2</sub>		3842
	Invader	CCATAGAGGACATTCAGGATGACTGC		3843
	Stacker	tggcactcactggg		3844
	Arrestor	tcctgtcacagtgcgc		3845
hCEACAM5	1 Probe	AACGAGGCGCACAAATCACTGCGC-NH <sub>2</sub>		3846
	Stacker	ctggcactcactgg		3847
	Arrestor	gcgcagtgtattgcgc		3848
hCEACAM5	2 Probe	CCGTCACGCCCTCCTTGCTGTGT-NH <sub>2</sub>		3849
	Invader	GGTTCTGGGTTTCACATTTGTAGA		3850
	Stacker	cattctgtgacattgaatagagt		3851
	Arrestor	acacagcaaggaggcgc		3852
hCEACAM5	1 Probe	AACGAGGCGCACCCACTGAGTAGA-NH <sub>2</sub>		3853
	Invader	GGTCCTACATCATTCCTTGTGAA		3854
	Stacker	gtgagggtcctgtt		3855
	Arrestor	tctactcagtgtgcgc		3856

hCEACAM5	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTTGCTGGAT-NH <sub>2</sub> TTGGAGATAAAGAGCTCTTGTGTGTGA gttcccatcaatcaga atccagcaagtgcgc	3857 3858 3859 3860
hNOS2A	2 Probe Invader Arrestor	CCGTCACGCCCTCGTTTCTATCTCCTTTGT-NH <sub>2</sub> CGTCAGTTGGTCGGTTCCTGTTC acaaaggagatagaaacgagggcg	3861 3862 3863
hNOS2A	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGTTTCTATCTC-NH <sub>2</sub> CGTCAGTTGGTCGGTTCCTGTTC ctttgtaccgctcc gagatagaaacgagggcg	3864 3865 3866 3867
hOSM	1 Probe Invader Stacker Arrestor	AACGCGGCGCACTGTTGTTCT-NH <sub>2</sub> GCTGGGCCATGCAGTAGAA gagccgaggatgt aggaacacacagtgcgc	3868 3869 3870 3871
hOSM	1 Probe Stacker	AACGAGGCGCACTGTTGTTCC-NH <sub>2</sub> tgagcccgaggatgt	3872 3873
hOSM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGTCTGAGTTGT-NH <sub>2</sub> GTGGGCTCAGCCGTC ccagcagctggg acaacacagacgtgcgc	3874 3875 3876 3877
hICAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGGGCTTGTGTGTTCC-NH <sub>2</sub> CCGGATAGGTTACAGGGAGGCGTC ggtttcatgggggcct gaacacacaagccgagggcg	3878 3879 3880 3881





Neomycin	1 Probe	AACGAGGGCGCACAGTTCATTCA-NH <sub>2</sub>	3904
	Invader	CGCTGCCCTCGTCCTGA	3905
	Stacker	ggcaccggacagg	3906
	Arrestor	cigaatgaactggtgcgc	3907
hMMP3	2 Probe	CCGTCACGCGCTCGTCCATTGTTCA-NH <sub>2</sub>	3908
	Invader	TGGTCCCTGTTGTATCCTTTC	3909
	Stacker	tcatacatcaaaagtgggca	3910
	Arrestor	tgaacaatggacgagggcg	3911
hMMP3	2 Probe	CCGTCACGCGCTCGTCCATTGTTCA-NH <sub>2</sub>	3912
	Stacker	catcatcaaaagtgggcatc	3913
	Arrestor	atgaacaatggacgagggcg	3914
hMMP13	1 Probe	AACGAGGGCGCACTCAAGGGATAAGGA-NH <sub>2</sub>	3915
	Invader	CCTCGGAGACTGGTAATGGCAA	3916
	Stacker	agggcacattgtctg	3917
	Arrestor	tccttatccctfagtgcgcg	3918
hMMP13	2 Probe	CCGTCGCTGCGTTTCTTCCC-NH <sub>2</sub>	3919
	Invader	CAAGCTTTCTCCTGATAGCTCA	3920
	Stacker	ctaccccgcactic	3921
	Arrestor	gggaagaaacgcag	3922
hMMP13	2 Probe	CCGTCGCTGCGTTTCTTCCCC-NH <sub>2</sub>	3923
	Stacker	taccccgcactic	3924
	Arrestor	ggggaagaaacgcag	3925
hMMP13	1 Probe	AACGAGGGCGCACGGCATCAAGG-NH <sub>2</sub>	3926
	Invader	GTTTCTCCTCGGAGACTGGTAATC	3927
	Stacker	gataaggaagggtcacatttg	3928
	Arrestor	ccttgatgccgtgcgc	3929

hMMP13	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTCTTCTTCC-NH <sub>2</sub> GAACCAAGCTTTTCTCCTGATAGCA cctacccgcact ggaagaagagtgcg	3930 3931 3932 3933
hLip	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTTTGTTCGA-NH <sub>2</sub> AGAGTGATGGGAATTTTCTGCATTTTCTA gtagtacatgtaaaagtgtt tcggaacaaaaggcg	3934 3935 3936 3937
hLip	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTTTGTTCG-NH <sub>2</sub> AGAGTGATGGGAATTTTCTGCATTTTCTA agtagtacatgtaaaagtgt cggaacaaaaggcg	3938 3939 3940 3941
hLip	2 Probe Stacker Arrestor	CCGTCACGCCTCTTTTGTTCGA-NH <sub>2</sub> gtagtacatgtaaaagtgtt tcggaacaaaaggcg	3942 3943 3944
hLip	2 Probe Arrestor	CCGTCACGCCTCTTTTGTTCG-NH <sub>2</sub> cggaacaaaaggcg	3945 3946
r/m Lip	2 Probe Invader Stacker Arrestor	CCGTCACGCCTCGGAGTCAAT-NH <sub>2</sub> GCAGGTTGCTGTGTGCAAC gaagaggcacagaacg attgactccgaggcg	3947 3948 3949 3950
r/m Lip	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGATGGGAATTTTC-NH <sub>2</sub> GTAATTCCTTCGCCAGGGA tttatcttctttgtccc gaaattcccatcagtcgc	3951 3952 3953 3954

r/m Lipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGCTTCTTCA-NH <sub>2</sub> TCTCTTGACTCATCTGCTCTTTA giccttgactcaggc tgaagaagcagtgccg	3955 3956 3957 3958
r/m Lipc	1 Probe Invader Stacker Arrestor	AACGAGGCGCACTGCTTCTTCA-NH <sub>2</sub> TCTCTTGACTCATCTGCTCTTTA ctttgactcaggcac actgaagaagcagtgccg	3959 3960 3961 3962
hVCAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGCCTTTGTTG-NH <sub>2</sub> GGGCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcatc caacaaaggcgaggcg	3963 3964 3965 3966
hVCAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACATGTGTAATTTAGCT-NH <sub>2</sub> GTGGGCACAGAAATCCATTTTCATCAC cggaacaaagaactttcca agctaaattacacatgtagc	3967 3968 3969 3970
hVCAM	1 Probe Stacker Arrestor	AACGAGGCGCACATGTGTAATTTAGCT-NH <sub>2</sub> ggcaacaagaactttccaat gagctaaattacacatgtagc	3971 3972 3973
hVCAM	1 Probe Invader Stacker Arrestor	AACGAGGCGCACGCCCTTTGTTG-NH <sub>2</sub> GCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcat caacaaaggcgaggcg	3974 3975 3976 3977
hVCAM	2 Probe Invader Stacker Arrestor	CCGTCACGCCCTCGCCTTTGTTG-NH <sub>2</sub> GCAACATTGACATAAAGTGTTGCGTACTCTC ggctgaattccatgcat caacaaaggcgaggcg	3978 3979 3980 3981

hRPL19	1 Probe Invader Stacker Arrestor	AAGCAGGCGCACCTTCCTTGG-NH <sub>2</sub> CTCTTCACGGCGCTTGCGTGA tcttagacctgcgagcc ccaaggaagggtgcgc	3982 3983 3984 3985
hRPL19	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTCCTTGG-NH <sub>2</sub> GCTCTTCACGGCGCTTGCGA gtcttagacctgcgagcc caaggaagcagtgccg	3986 3987 3988 3989
r/m RPL19	1 Probe Invader Stacker Arrestor	AAGCAGGCGCACCTTCCTTGG-NH <sub>2</sub> CTCCCGGCGCTTTCGTGA tcttagacctgcgagcc ccaaggaagggtgcgc	3990 3991 3992 3993
r/m RPL19	1 Probe Invader Stacker Arrestor	AACGAGGCGCACCTTCCTTGG-NH <sub>2</sub> CCTCCCGGCGCTTTCGA gtcttagacctgcgagcc caaggaagcagtgccg	3994 3995 3996 3997
h18S rRNA	Probe Probe Probe INVADER oligonucleotide Stacker Stacker Arrestor	Red-CGA-EQ-TTTTACTTCC Red-CGA-EQ-TTTTACTTCTCT FI-CGACTTTTACTTCTCT GGTTCACCTACGGAAACCTTGTAA tctagatagtcaggttcgaccg tctagatagtcaggttcgaccgtctctc agaggaagtaaaattcg	3998 3999 4000 4001 4002 4003 4004

FIGURE 50

